**ASSESSING THE IMPACT OF LONGRICH NETWORK MARKETING ON SOCIO-ECONOMIC DEVELOPMENT IN YAOUNDÉ VI SUB-DIVISION, CAMEROON.**

**Abstract**

This research, titled “The Effect of Network Marketing (Longrich) on Socio-Economic Development in Yaoundé VI Sub-Division,” investigates the relationship between network marketing practices and socio-economic outcomes in local communities. The study emerged from the recognition that network marketing, particularly through Longrich, has become a prominent avenue for income generation and entrepreneurship in Yaoundé VI, amidst rising unemployment and economic instability. A quantitative research approach was employed, with a simple random sample of 120 Longrich participants in Yaoundé VI. Data were collected using a structured questionnaire based on a 5-point Likert scale, aimed at assessing the effects of network marketing technology, work ethics, and cost-effectiveness on socio-economic development. Exploratory factor analysis (EFA) was applied to identify relevant constructs, and regression analysis was used to test the significance of their impact. The findings revealed that network marketing significantly influences socio-economic development, with technology (p = 0.001), work ethics (p = 0.000), and cost-effectiveness (p = 0.000) each showing strong positive relationships with socio-economic progress. Specifically, the results demonstrated that work ethics accounted for 48.8% of the variance in socio-economic development, cost-effectiveness for 24.2%, and technology for 19.1%. Based on these findings, the study recommends the promotion of ethical practices, technology adoption, and cost-efficient strategies in network marketing, along with government support to enhance its contribution to local economic development.

**Keywords**: Network Marketing, Longrich, Socio-Economic Development, Yaoundé VI, Entrepreneurship, Economic Growth

**1.1 INTRODUCTION**

This study investigates the impact of network marketing, specifically the Longrich business model, on socio-economic development in the Yaoundé VI Sub-Division of Cameroon. Network marketing, also known as multi-level marketing (MLM), emerged in the 1940s as a direct sales strategy in the United States (Mackenzie, 2015). Over time, it has evolved into a global business model, offering individuals the opportunity to earn commissions through direct sales and recruitment (Robertson, 2018). Unlike traditional retail models, where products pass through several intermediaries, network marketing connects manufacturers directly to consumers, bypassing retail stores and utilizing a commission-based structure to incentivize sales and recruitment (Bakker, 2019).

While network marketing has contributed to the creation of wealth for some individuals, the majority of participants do not achieve significant financial success (Wang, 2017). The business model is often misunderstood and mistakenly equated with pyramid schemes, yet legal network marketing organizations focus on product sales and reward distributors for their efforts, not solely for recruitment (Smith & Thomas, 2016). In Cameroon, network marketing has gained substantial traction, particularly with health and wellness products, as companies like Longrich and AIM Global have expanded their reach, benefiting from a growing population and changing economic conditions (Mouafo, 2020). The rise of network marketing in Cameroon reflects broader global trends, where individuals are increasingly seeking alternative income sources due to diminishing job security and economic instability (Ngwa, 2019).

This research aims to explore the socio-economic implications of network marketing in Yaoundé VI, examining both the potential benefits and challenges faced by participants in this business model. By analyzing the relationship between network marketing activities and local economic development, this study seeks to contribute to the understanding of how such models can influence socio-economic progress in Cameroon's urban areas.

**1.2. PROBLEM STATEMENT**

Network marketing, a business model that leverages personal networks for product promotion and recruitment, has gained substantial traction in recent years. In this model, individuals use their own circle of acquaintances—family, friends, colleagues, and acquaintances—to promote products or services, and to recruit others into the business (Kotler & Keller, 2016). Longrich, a prominent international network marketing company in the health, wellness, and beauty sectors, has become one of the leading players in the Cameroonian market, especially in the Yaoundé VI Sub-Division (Ngwa, 2021).

Despite the global spread of network marketing over the past five decades, its introduction into Cameroon is relatively recent. Sources suggest that the model became more visible in the early 2000s, with multiple network marketing companies, including Longrich, establishing a presence (Mbandjock, 2018). Since then, network marketing has grown, with both domestic and international companies expanding their operations in the country (Aboh, 2020). While network marketing presents significant economic opportunities, particularly in terms of employment and personal development, it also raises concerns regarding its broader socio-economic impacts on local communities (Mbah, 2019).

Proponents of network marketing argue that it provides benefits such as employment opportunities, personal growth, and the diffusion of knowledge and technology (Chamberlain & Flenner, 2017). Furthermore, they suggest that despite the short-term outflow of foreign exchange due to the involvement of international companies, network marketing could eventually lead to foreign exchange inflows if the business expands internationally (Tchoumi & Jidji, 2020). However, critics contend that the model poses significant socio-economic challenges for Cameroon. These concerns include the diversion of human resources from more productive sectors, as many professionals abandon their careers to sell products, potentially undermining the nation’s overall economic capacity (Mbah, 2019). Critics also point out that the structure of network marketing—often described as pyramid-like—benefits only a small number of people at the top, while the majority of participants fail to generate substantial income, exacerbating income inequality and potentially contributing to social unrest (Cohen & Musson, 2018).

Additionally, concerns have been raised about the pricing strategies employed by network marketing companies like Longrich. Products often carry inflated prices that do not reflect their actual production costs, which critics argue unfairly burden consumers and distort the local market (Smith, 2021).

Despite the growing presence of network marketing in Cameroon, particularly Longrich, there has been limited research examining the socio-economic implications of this business model. Most studies have either focused on the broader global impact of network marketing or have been limited to other regions, such as West Africa (Aboh, 2020). In this context, there is a significant gap in understanding how Longrich network marketing specifically affects the socio-economic development of Cameroon, especially in terms of employment, income distribution, and consumer behavior in Yaoundé VI (Ngwa, 2021).

This study aims to fill this gap by critically examining the socio-economic impact of Longrich network marketing in Yaoundé VI, Sub-Division. The research will assess both the positive and negative consequences of this business model on local communities, focusing on its influence on employment patterns, income inequality, and consumer behavior. By addressing these issues, the study will provide valuable insights into the role of network marketing in the socio-economic development of Cameroon and inform policy discussions on its regulation (Chamberlain & Flenner, 2017).

**1.3 RESEARCH OBJECTIVES**

The main research objective here, is to assess the effect of network marketing on socio economic development in Yaoundé VI Sub-Division. The specific objectives are;

1. To evaluate the impact of network marketing technology on the socio-economic development of the Yaoundé VI Sub-Division.
2. To examine the influence of network marketing work ethics on the socio-economic development of the Yaoundé VI Sub-Division.
3. To assess the cost-effectiveness of network marketing and its effect on the socio-economic development of the Yaoundé VI Sub-Division.

**1.4 RESEARCH QUESTIONS**

The main research question is to assess the effect of network marketing on socio-economic development in the Yaoundé VI Sub-Division. The specific research questions are:

1. How does network marketing technology impact the socio-economic development of the Yaoundé VI Sub-Division?
2. In what ways do the work ethics in network marketing influence the socio-economic development of the Yaoundé VI Sub-Division?
3. How does the cost-effectiveness of network marketing affect the socio-economic development of the Yaoundé VI Sub-Division?

**1.5 NULL HYPOTHESES**

**H₀₁:** Network marketing technology has no significant impact on the socio-economic development of the Yaoundé VI Sub-Division.

**H₀₂:** Network marketing work ethics have no significant influence on the socio-economic development of the Yaoundé VI Sub-Division.

**H₀₃:** The cost-effectiveness of network marketing has no significant effect on the socio-economic development of the Yaoundé VI Sub-Division.

**1.6 SIGNIFICANCE OF THE STUDY**

The significance of this study lies in its potential to enhance understanding of how network marketing, particularly through companies like Longrich, influences the socio-economic development of Yaoundé VI Sub-Division, Cameroon, and by extension, the broader national context. The study holds considerable value for multiple stakeholders, including the researcher, the local population, and the nation at large. Below are the key ways in which this study will be significant:

**a. Contribution to Academic Knowledge and Research**

This study provides an in-depth analysis of the socio-economic impacts of network marketing on local communities, a topic that has received limited attention in the Cameroonian context. Network marketing has been shown to influence economic development through job creation, technology diffusion, and business innovation (Mwangi, 2019). By examining how technology, work ethics, and cost-effectiveness influence socio-economic development, this research will fill a gap in the existing literature on alternative business models, like network marketing, in emerging economies (Adams & Karpov, 2018). The findings of this research will offer new insights into how network marketing can either enhance or undermine socio-economic progress in Cameroon.

**b. Practical Relevance to the Local Population and Entrepreneurs**

The findings of this study will directly benefit individuals involved in or considering entering the network marketing business in Yaoundé VI Sub-Division. Understanding the impact of network marketing technology, work ethics, and cost-effectiveness on socio-economic outcomes will help entrepreneurs make informed decisions, optimize their business strategies, and improve their success rate. While MLMs are often marketed as avenues for women’s empowerment, critics argue that they may perpetuate gendered economic exploitation under the guise of entrepreneurship (Bannister & Kiefer, 2021). Previous studies have suggested that effective use of technology in network marketing can enhance sales, expand market reach, and improve financial returns (Smith, 2020). The research will provide a clear understanding of how entrepreneurs can leverage these aspects for greater economic benefit in local communities.

**c. Economic Implications for Cameroon**

On a national level, the study will provide a deeper understanding of the potential benefits and drawbacks of network marketing as a business model in Cameroon. Research indicates that network marketing, if properly regulated, can stimulate employment, generate income, and promote local entrepreneurship (Ochieng, 2021). If network marketing is proven to positively impact local economies, the government may consider developing policies to support this sector, such as business incubation programs, training workshops, and appropriate regulations (Mwangi, 2019). Additionally, the findings could be used to inform strategies aimed at leveraging network marketing as a tool for economic diversification and poverty reduction, a key goal for Cameroon’s long-term development.

**d. Professional Development for the Researcher**

The study will serve as a crucial stepping stone in the researcher’s academic and professional development. By engaging in the process of designing, conducting, and analyzing the study, the researcher will develop valuable research skills in areas such as data collection, statistical analysis, and report writing (Jones, 2017). Furthermore, the researcher will gain the ability to synthesize existing literature and apply theoretical frameworks to practical business models. These skills are essential not only for completing the current research but also for the researcher’s future endeavors in social science research. The researcher will also gain a deeper understanding of ethical research practices, which is vital for future professional endeavors (Adams & Karpov, 2018).

**e. Long-term Societal Impact**

The study aims to raise awareness of the broader socio-economic implications of network marketing for local communities and society as a whole. By examining both the positive and negative impacts of network marketing, the research will help reduce misconceptions and foster a balanced perspective on its role in socio-economic development (Smith, 2020). Policymakers and entrepreneurs will be better informed about how to navigate the challenges of this business model. Moreover, the findings will contribute to an informed public discourse on the sustainability and fairness of network marketing, which is important for ensuring that the industry supports, rather than undermines, national development (Ochieng, 2021).

**2 REVIEW OF RELEVANT LITERATURE**

**2.1 MARKETING**

Marketing is the process by which businesses promote and sell products or services to consumers (Drury, 2020). It encompasses activities such as advertising, market research, sales, and distribution. The fundamental goal of marketing is to create customer value by positioning goods or services in a way that consumers perceive them as necessary or advantageous (Drury, 2020). One of the most crucial elements of marketing is its ability to build relationships with consumers through continuous communication and the development of loyalty. According to the Consistency Theory, consumers seek harmony between their personal beliefs and behaviors with social norms, making them more likely to purchase products or services that align with these norms (Drury, 2020). Maslow's Hierarchy of Needs further supports this, suggesting that people are motivated to fulfill basic needs before progressing to higher-level desires, influencing how businesses target specific consumer needs (Maslow, 1943). The Elaboration Likelihood Model explains that persuasion can occur through central or peripheral routes, with the central route requiring deep thinking and the peripheral relying on associations or cues (Petty & Cacioppo, 1986). These theories contribute to understanding how effective marketing strategies persuade consumers to make decisions and engage with products or services.

**2.2 NETWORK MARKETING**

Network marketing, also known as multi-level marketing (MLM), is a business model that uses a network of distributors to grow its reach and revenue. In this model, participants earn income both from their direct sales and from the sales made by the people they recruit, creating multiple levels of commission-based compensation (Wolfe, 2021). The success of MLM participants often hinges on their perceived trustworthiness and entrepreneurial traits, which directly impact customer relationships and recruitment efforts (Coughlan & Grayson, 2020). The structure of network marketing allows individuals to generate income without a large upfront investment. Single-tier network marketing involves direct sales where distributors sell products without recruiting others, such as in the case of affiliate marketing programs. On the other hand, multi-level marketing (MLM) requires participants to recruit new distributors and receive compensation based on the sales volume generated by their recruits (Wolfe, 2021). Two-tier network marketing combines elements of both, where participants are paid for direct sales as well as for the sales made by individuals they recruit (Wolfe, 2021).

One company that employs this network marketing model is Longrich, a global beauty and wellness company. Longrich has gained popularity in Cameroon by offering consumers not only high-quality products but also the opportunity to generate income through the recruitment of new distributors (Longrich, 2021). Through this model, individuals can achieve financial independence, and many have reported significant improvements in their living standards as a result of their involvement in the network.

**2.3 SOCIO-ECONOMIC DEVELOPMENT**

Socio-economic development refers to the process through which a society improves its economic and social conditions, enhancing the quality of life for its citizens. This concept encompasses a range of indicators, including economic growth, employment rates, educational achievements, and health standards (Sirin, 2005). The socio-economic development of a region is influenced by various factors, including technological advancements, changes in legislation, and shifts in the physical and social environment. For example, in Yaoundé VI Sub-Division, network marketing has played a role in improving the socio-economic status of residents by creating new employment opportunities and increasing household income levels. When individuals or families engage in network marketing, they can earn money on a regular basis, which helps elevate their standard of living and enables them to invest in education, healthcare, and other necessities (Sirin, 2005).

The benefits of socio-economic development are multifaceted. Employment, for instance, is a critical factor in socio-economic growth. It allows individuals to support themselves and their families, contributing to overall economic stability (Duncan & Murnane, 2011). Family income is another crucial element, as higher income levels are linked to better educational outcomes for children and improved access to healthcare (Sirin, 2005). In the case of network marketing, many families in Cameroon have seen an increase in income through participation in multi-level marketing programs, particularly with companies like Longrich (Longrich, 2021). As these families continue to earn from their network marketing efforts, they can invest in their future, leading to better educational outcomes and improved health conditions.

**2.4 THE EFFECT OF NETWORK MARKETING ON SOCIO-ECONOMIC DEVELOPMENT**

The effect of network marketing on socio-economic development, particularly in Yaoundé VI Sub-Division, has been a subject of interest in recent studies. Network marketing is known to create employment opportunities, generate income, and provide individuals with a sense of purpose and personal development (Wolfe, 2021). In Cameroon, network marketing companies like Longrich have introduced innovative business models that allow individuals to earn income through direct sales and recruitment of new distributors. This model has led to a reduction in unemployment rates as many individuals, especially those in lower-income brackets, find an opportunity to earn a steady income through network marketing (Longrich, 2021).

Furthermore, network marketing offers the advantage of residual income, meaning that individuals can continue to earn from previous efforts without having to work continuously. This concept of passive income is particularly appealing to individuals in Yaoundé VI Sub-Division, as it allows them to supplement their primary income without sacrificing their current job or lifestyle (Wolfe, 2021). In similar Sub-Saharan African contexts, such as Nigeria, MLM has shown potential in alleviating poverty by creating alternative income streams for low-income earners (Hassan & Bello, 2019). The flexibility provided by network marketing allows people to earn money on their own terms, which has contributed to greater financial independence and improved living standards for many in the region.

However, there are also challenges associated with network marketing. One of the main issues is the perception of network marketing as a pyramid scheme, which often deters potential recruits. Many individuals are skeptical about the sustainability of network marketing income, and some people are wary of getting involved due to negative perceptions about the legitimacy of MLM business models (Mayo, 2018). Despite these concerns, the overall impact of network marketing on socio-economic development in Yaoundé VI Sub-Division has been positive, with many participants reporting financial gains and personal growth.

**2.5 THE RELATIONSHIP BETWEEN NETWORK MARKETING AND SOCIO-ECONOMIC DEVELOPMENT**

Network marketing has the potential to significantly impact the socio-economic development of a region, especially in communities like Yaoundé VI Sub-Division. The primary benefits of network marketing include job creation, increased family income, and improved living standards. As people engage in network marketing, they develop entrepreneurial skills and financial literacy, which can have long-term benefits for the community as a whole (Wolfe, 2021). Additionally, network marketing provides individuals with the opportunity to create passive income streams, enabling them to earn money while focusing on other aspects of their lives.

As network marketing continues to grow in Cameroon, it is important to consider both its potential and limitations. While it has contributed to the reduction of unemployment and the improvement of living standards for many, challenges such as skepticism and negative perceptions must be addressed to ensure its continued success (Mayo, 2018). Nonetheless, network marketing remains a viable avenue for socio-economic development, particularly in regions with high levels of unemployment and limited access to traditional job opportunities (Longrich, 2021).

**2.6 THEORETICAL FOUNDATION AND EMPIRICAL SUPPORT FOR HYPOTHESES**

The formation of the study’s hypotheses is grounded in both theoretical and empirical literature. Maslow’s Hierarchy of Needs and Human Capital Theory provide foundational insight into why individuals engage in network marketing ventures such as Longrich. Maslow (1943) posits that individuals are motivated to pursue economic opportunities that fulfill their physiological and safety needs, which MLM structures often promise through financial rewards. Likewise, Human Capital Theory suggests that individuals will invest their time and effort into ventures where they perceive a return on that investment especially when it contributes to skills development, entrepreneurship, or financial independence.

Empirical studies also support these assumptions. For instance, Hassan and Bello (2019) found that MLM activities contributed significantly to poverty alleviation and household income among rural populations in Nigeria. Similarly, Coughlan and Grayson (2020) emphasized that entrepreneurial characteristics especially ethical behavior and trustworthiness—are critical in building successful network marketing ventures. Furthermore, Bannister and Kiefer (2021) provided evidence that although MLM offers economic opportunities, its benefits are not uniform; women, in particular, may experience both empowerment and exploitation, depending on how the MLM structure is implemented and regulated.

These theoretical and empirical insights indicate that variables such as technology use, work ethics, and cost-effectiveness in network marketing are expected to significantly influence socio-economic development. Therefore, the hypotheses in this study are built upon well-established theoretical models and validated research findings, increasing the reliability and relevance of the research framework

**3 METHODOLOGY**

**3.1 RESEARCH PHILOSOPHY**

The research is underpinned by an ontological and epistemological framework that reflects the researcher’s beliefs about the nature of reality and knowledge. The study adopts an interpretivist approach, which emphasizes understanding social phenomena from the perspective of the participants. Ontologically, the research aligns with social constructionism, viewing social phenomena as continuously constructed through social interactions. Epistemologically, the research adopts a subjective, qualitative approach to understand the deeper truths of the phenomena under study, recognizing the role of values in the research process.

**3.2 RESEARCH DESIGN**

The study uses a descriptive research design, aimed at accurately portraying the characteristics of network marketing in the context of socio-economic development. Descriptive research is chosen for its ability to gather rich, detailed data and describe phenomena without manipulating variables. This design enables the collection of comprehensive data to explore the research questions and test hypotheses about the impact of network marketing.

**3.3 RESEARCH STRATEGY**

A survey research strategy is employed, which allows for the collection of quantitative data through structured questionnaires. This strategy is effective for addressing questions about the characteristics, behaviors, and perceptions of network marketing members. The survey method is chosen for its efficiency in collecting data from a large sample, facilitating generalization to the target population.

**3.4 STUDY POPULATION AND SAMPLING**

The target population consists of members of the Longrich network marketing company in Yaoundé VI Sub-Division, Cameroon. A sample of 120 respondents is selected using simple random sampling to ensure a representative cross-section of the population. Non-probability sampling is used for participants outside of the target area, employing purposive sampling techniques.

**3.5 DATA COLLECTION**

Data is collected using both primary and secondary sources. Primary data is gathered via a structured questionnaire with a Likert scale format, focusing on the impact of network marketing on socio-economic development. Secondary data is drawn from existing literature, including journals, government reports, and articles. The primary data provides the core insights, while secondary data supports the theoretical background.

**3.6 DATA ANALYSIS**

Data analysis involves both quantitative and qualitative techniques. Quantitative data is analyzed using SPSS and Microsoft Excel for descriptive and inferential statistics, while qualitative data is interpreted to derive themes and insights. Validity measures, including construct validity, content validity, and expert validity, are employed to ensure the reliability and accuracy of the data collection instruments.

**3.7 ETHICAL CONSIDERATIONS**

The research adheres to ethical guidelines by ensuring confidentiality and anonymity of respondents. The collected data is treated with the utmost care, and no personally identifiable information is disclosed. Informed consent is obtained from all participants, and the data is securely stored.

**4 DATA ANALYSIS**

**4.1 MISSING DATA AND NON-RESPONSE BIAS ANALYSIS**

It is common for respondents to omit certain questions in a survey, either intentionally or unintentionally, leading to missing data. Missing data can be classified into different categories: Missing Completely at Random (MCAR) and Missing Not at Random (MNAR). Data that are intentionally omitted are referred to as MCAR, whereas unintentional omissions are classified as MNAR.

In this study, Little’s MCAR test was conducted to determine if the missing data was missing completely at random. The test results were as follows: Little's MCAR test: Chi-Square = 731.351, DF = 149, Sig. = 0.210. A p-value of 0.210 suggests that there is no significant evidence to reject the null hypothesis, which means that the missing data is indeed MCAR. This outcome is favorable, as it allows for the assumption that the missing data does not exhibit any systematic bias and is randomly distributed across the survey items.

The overall proportion of missing data across all variables was found to be less than 5%, which is a relatively small amount of missingness. Given the MCAR result and the low proportion of missing data, a complete dataset was generated using the Expectation-Maximization (EM) algorithm, a robust method for handling missing data when the MCAR assumption holds.

**4.2 KMO AND BARTLETT’S TEST**

The Kaiser Meyer Olklin (KMO) measures the sampling adequacy (which determines if the response given with the sample are adequate or not) which should be more than 0.5 as a minimum (barely accepted), a value between 0.6-0.8 acceptable, and values of 0.9 and above are perfect.

Table :KMO and Bartlett's Test

|  |  |  |
| --- | --- | --- |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .725 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 162.198 |
| Df | 10 |
| Sig. | .000 |

Source: SPSS (2025)

Looking at the table above, the KMO measure is 0.725, which is between 0.7-0.8 and therefore can be acceptable. Bartlett’s test is used to test the statistical significance of the correlation. It is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 on the correlation matrix table above and all off-diagonal elements are close to 0. We can see that Bartlett’s test is significant 0.000. This significance is less than 0.05 so equal to 0. This indicates that correlations between items are sufficiently large enough for PCA and consequently EFA.

**4.3 EXPLORATORY FACTOR ANALYSIS**

Not every indicator explains what it must explain and as well not every construct explains what it’s supposed to explain. This is caused by noise in the data. Dimension reduction analysis is typically conducted to solve such a situation of misleading indicators in the data set. In this study, the exploratory factor analysis was conducted to examine the level of noise involved in the data set and appropriate indicators and constructs were retained and some were rejected due to misfit in their measurement specifications. The results for the EFA is shown below

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
|  | Component | | |
| 1 | 2 | 3 |
| TECH1 |  | .794 |  |
| TECH2 |  | .890 |  |
| TECH3 |  | .719 |  |
| WE2 |  |  | .509 |
| WE3 |  |  | .915 |
| CE3 | .832 |  |  |
| CE5 | .935 |  |  |
| Extraction Method: Principal Component Analysis.  Rotation Method: Pro max with Kaiser Normalization. | | | |
| a. Rotation converged in 6 iterations. | | | |

Source: SPSS (2025)

The table above represents both how the variables are weighted for each factor but also the correlation between the variables and the factor. Because they are correlations, the range of possible values is -1 to +1. The option blank 0.4 was used on the format subcommand, which informs SPSS not to print any correlations with a value of 0.4 or less. This makes the option easier to read by removing the constructs of low correlations that are probably not meaningful. Here, there are three columns because the independent variable contains three variable.

For the first latent construct (Technology), three indicators were retained which are TECH1, TECH2, and TECH3. For the second latent construct (Work Ethic), two indicators were also retained which are WE2 and WE3. For the third latent construct (Cost Effective), two indicators were retained which are CE3 and CE5.

**4.4 MULTIVARIATE NORMALITY**

The probability plot for the distribution was conducted to test for normality and the results revealed that the samples follow a bell-shaped curve indicating a normal distribution as shown below.

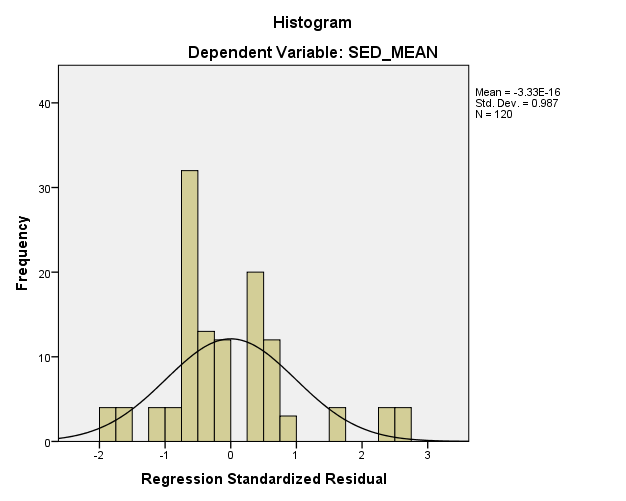


Figure : Normal Plot Probability

**4.5 REGRESSION ANALYSIS**

A simple regression analysis was conducted to validate the outcome of the correlation analysis. The results are presented below.

**4.5.1 Regression analysis of Network marketing technology and socio economic development.**

Table : Model Summary of Network marketing technology and socio economic development.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .301a | .191 | .083 | .89591 |
| a. Predictors: (Constant), TECH\_MEAN | | | | |

Source; SPSS (2025)

Table : ANOVA of Network marketing technology and socio economic development

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 9.441 | 1 | 9.441 | 11.763 | .001b |
| Residual | 94.712 | 118 | .803 |  |  |
| Total | 104.154 | 119 |  |  |  |
| a. Dependent Variable: SED\_MEAN | | | | | | |
| b. Predictors: (Constant), TECH\_MEAN | | | | | | |

Source: SPSS (2025)

Table : Coefficientsa of Network marketing technology and socio economic development.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 1.318 | .243 |  | 5.421 | .000 |
| TECH\_MEAN | .397 | .116 | .301 | 3.430 | .001 |
| a. Dependent Variable: SED\_MEAN | | | | | | |

Source: SPSS (2025)

From the model summary table above, R2 is 0.191, which implies that Network marketing technology affects socio economic development in Yaoundé VI Sub-Division by 19.1%. This implies that the dependent variable is explained by the independent variable at 19.1% at a level of significance of 1%. AS seen on the ANOVA table, F=11.763.

On the coefficient table as seen above, the constant 1.318 represents the estimated value of socio economic development when network-marketing technology is at zero. The slop of network marketing technology is 0.397, which means there will be a change in socio economic development of Yaoundé VI Sub-Division by 0.397 when network marketing technology change by 1. Thus, factors of network marketing technology are effective in predicting socio economic development in Yaoundé VI Sub-Division.

From the above analysis, hypothesis

H1: Network marketing technology has has a significant on the socio economic development of Yaounde VI Sub-Division, is accepted.

**4.5.2 Regression analysis of Network marketing technology and socio economic development.**

Table : Model Summary of network marketing work ethic on the socio economic development of Yaoundé VI Sub-Division.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .699a | .488 | .484 | .67220 |
| a. Predictors: (Constant), WE\_MEAN | | | | |

Source: SPSS (2021)

Table : ANOVA of network marketing work ethic on the socio economic development of Yaoundé VI Sub-Division.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 50.835 | 1 | 50.835 | 112.504 | .000b |
| Residual | 53.319 | 118 | .452 |  |  |
| Total | 104.154 | 119 |  |  |  |
| a. Dependent Variable: SED\_MEAN | | | | | | |
| b. Predictors: (Constant), WE\_MEAN | | | | | | |

Source: SPSS (2025)

Table : Coefficientsa of network marketing work ethic on the socio economic development of Yaoundé VI Sub-Division.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| sModel | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | .503 | .163 |  | 3.092 | .002 |
| WE\_MEAN | .776 | .073 | .699 | 10.607 | .000 |
| a. Dependent Variable: SED\_MEAN | | | | | | |

Source: SPSS (2025)

The model table above demonstrates that R2 is 0.488 which means network marketing work ethic explains customers buying behavior by 48.8% this signifies that the dependent variable is been explained by the independent variable by 48.8% at a level of significance of 1% and F= 112.504 as shown on the ANOVA table.

From the regression coefficient table, the constant 0.508 represents the estimated value of socio economic development in yaounde when network marketing work ethic is at zero. The slope of longrich members about work ethic 0.776 which means, a change in socio economic development of Yaounde VI Sub-Division is 0.776 when network marketing work ethic is at 1. This implies that the factors of network marketing work ethics are predictors of socio economic development of Yaoundé VI Sub-Division.

The outcome of this regression analysis is the same as that of the correlation analysis thus hypothesis H2: Network marketing work ethics has a positive and significant influence on the socio economic development of Yaoundé VI Sub-Division, is accepted.

**4.5.3: The regression analysis of network marketing cost effectiveness on the socio economic development of Yaoundé VI Sub-Division.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table 8: Model Summary the influence of network marketing cost effectiveness on the socio economic development of Yaoundé VI Sub-Division. | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .492a | .242 | .236 | .81779 |
| a. Predictors: (Constant), CE\_MEAN | | | | |

Source: SPSS (2025)

Table 9: ANOVAa of The influence of network marketing cost effectiveness on the socio economic development of Yaoundé VI Sub-Division.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 25.237 | 1 | 25.237 | 37.736 | .000b |
| Residual | 78.916 | 118 | .669 |  |  |
| Total | 104.154 | 119 |  |  |  |
| a. Dependent Variable: SED\_MEAN | | | | | | |
| b. Predictors: (Constant), CE\_MEAN | | | | | | |

Source: SPSS (2025)

Table : Coefficientsa of The influence of network marketing cost effectiveness on the socio economic development of Yaoundé VI Sub-Division.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 1.146 | .173 |  | 6.632 | .000 |
| CE\_MEAN | .469 | .076 | .492 | 6.143 | .000 |
| a. Dependent Variable: SED\_MEAN | | | | | | |

Source: SPSS (2025)

From the model summary table above, R2 has a value of 0.242, which implies that network marketing cost effectiveness explains socio economic development of Yaounde by 24.2%. This signifies that the dependent factor is been explained by the independent factor at 24.4% with a level of significance of 1% and F= 37.736 as seen on the ANOVA table.

The regression coefficient as presented on the table indicates that the constant 1.146 represents the estimated value socio economic development network cost effectiveness is zero. The gradient of network marketing cost effectiveness, 0.469 means a change in socio economic development is 0.469 when network marketing cost effectiveness changes by 1.

From the above results, we realise that the outcome is the same as that of the correlation analysis, thus hypothesis H3: Network marketing cost effectiveness has a positive and significant influence on the socio economic development of Yaoundé VI Sub-Division, is accepted as was done in the situation of the correlation analysis.

**4.6 PRESENTATION OF HYPOTHESIS FINDINGS**

Table 11: Hypothesis summary

|  |  |  |  |
| --- | --- | --- | --- |
| **S**/**N** | **Null Hypotheses (H0: µ = 0)** | **Significance** | **Decision** |
| 1 | Network marketing technology has a significant on the socio economic development of Yaoundé VI Sub-Division. | P-Value (0.000) < 0.05 | Accept the alternative hypothesis and conclude that network marketing technology has a significant on the socio economic development of Yaounde VI Sub-Division |
| 2 | Network marketing work ethics has a positive and significant influence on the socio-economic development of Yaoundé VI Sub-Division | P-Value (0.000) < 0.05 | Accept alternative hypothesis and conclude that Network marketing work ethics has a positive and significant influence on the socio economic development of Yaoundé VI Sub-Division |
| 3 | Network marketing cost effectiveness has a positive and significant influence on the socio economic development of Yaoundé VI Sub-Division | P-Value (0.000) < 0.05 | Accept the alternative hypothesis and conclude network marketing cost effectiveness has a positive and significant influence on the socio economic development of Yaoundé VI Sub-Division |

Source Author (2025)

**5 CONCLUSION AND RECOMMENDATION**

**5.1 CONCLUSION**

The research findings highlight the significant role of network marketing, specifically Longrich, in contributing to the socio-economic development of Yaoundé VI Sub-Division, Cameroon. The regression analysis results provide a more robust understanding of how different elements of network marketing impact socio-economic outcomes in the region.

1. **Network Marketing Technology**: The regression analysis (R² = 0.191) revealed that network marketing technology explains 19.1% of the variation in socio-economic development. The positive relationship is statistically significant (p-value = 0.001), indicating that improvements in network marketing technology directly contribute to enhanced socio-economic conditions in Yaoundé VI. Specifically, for every unit change in network marketing technology, socio-economic development increases by 0.397 units.
2. **Network Marketing Work Ethics**: The regression results show that network marketing work ethics accounts for 48.8% of the variance in socio-economic development (R² = 0.488). The positive and significant relationship (p-value = 0.000) between work ethics and socio-economic development emphasizes the importance of ethical behavior in driving positive outcomes. A 1-unit increase in work ethics corresponds to a 0.776 increase in socio-economic development.
3. **Network Marketing Cost Effectiveness**: Network marketing cost-effectiveness explains 24.2% of the variation in socio-economic development (R² = 0.242). This variable also demonstrated a positive and statistically significant effect (p-value = 0.000), with a 1-unit increase in cost-effectiveness resulting in a 0.469 increase in socio-economic development.

Overall, the regression analysis confirms that network marketing, through its technology, work ethics, and cost-effectiveness, plays a crucial role in driving socio-economic development in the region. As such, the hypothesis that network marketing positively influences socio-economic development is supported by the empirical data.

**5.2 RECOMMENDATIONS**

Given the positive impact of network marketing on socio-economic development, the following recommendations are proposed to enhance the effectiveness of this business model:

1. **Government Support and Regulation**: The government should actively regulate and support network marketing activities, ensuring that businesses like Longrich operate transparently and ethically. A regulatory framework will promote growth and protect consumers and distributors from fraudulent schemes, enhancing the sector's contribution to economic development.
2. **Enhancing Lead Generation and Recruitment**: As highlighted in the regression analysis, the success of network marketing is tied to efficient recruitment and lead generation. Therefore, it is recommended that network marketers focus on strategies to increase leads and build more extensive networks. Targeted marketing and personalized interactions will improve conversion rates, leading to more significant income generation and socio-economic improvements.
3. **Work Ethics Training**: The importance of work ethics, as evidenced by the strong correlation between ethical behavior and socio-economic development, suggests that network marketing companies should invest in comprehensive ethics training for their distributors. Promoting strong ethical standards within the industry will improve trust, credibility, and long-term success for both individual distributors and the network marketing model as a whole.
4. **Focus on Cost Effectiveness**: The significant impact of cost-effectiveness on socio-economic development highlights the need for network marketers to prioritize cost-efficient practices in product distribution and recruitment efforts. By lowering operational costs, businesses can pass on savings to consumers while improving the profitability of distributors, thus driving economic growth.
5. **Continuous Education and Improvement**: Distributors should focus on continuous learning and improvement to stay competitive in the dynamic network marketing environment. This includes staying updated on best practices in sales, marketing, and product knowledge. Regular training programs and personal development opportunities will empower distributors to achieve higher levels of success and contribute more effectively to local socio-economic growth.

**COMPETING INTERESTS DISCLAIMER:**

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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