

Assessment of Consumers Utilization of Information and Communication Technology for Consumption of Household Goods and Services in Choba, Rivers State Nigeria

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Abstract

The study assessed consumers' utilization of Information and Communication Technology (ICT) for the consumption of household goods and services in Choba Rivers State, Nigeria. Data was collected from 100 randomly selected respondents using a structured questionnaire. Descriptive statistics such as percentage and means while inferential statistic such as Pearson moment correlation were used in analyzing data. Majority of the respondents were males with ages ranging from 21 to 30 years and single. Most respondents had tertiary education and have been using ICT for 5 years for the consumption of household goods and services (58.5%) via smartphones (97.6%). Household electrical appliances (63.4%), phones (56.1%), clothes (68.3%), shoes (68.3%) and mobile phone vouchers (credit recharge) (56.1%) were the most consumed goods and service using ICT. When rated on a scale, the respondents indicated that consumption of goods and services via ICT improves time spent with the family (2.76), improves access to producers of goods and services (2.71), and makes goods and services easily available (3.51) as reasons for using ICT. The result showed that there was positive correlation between occupation and mobile phone ($r = .340, n = 100, p < 0.05$), negative correlation was observed between age and television ($r = - .313, n = 100, p < 0.05$) and a negative correlation was observed between marital status and television ($r = - .398, n = 100, p < 0.05$). It was recommended that Government and stakeholders should invest more on improving ICT infrastructure such as solar energy to avoid erratic and poor electricity supply

Key words: Consumer Utilization, ICT, Household, Goods, Services

INTRODUCTION

Households are in constant demand for goods and services to make their lives easy and meet their daily living requirements. Brisa, Pawlaka, and Polaka, (2017) opined that access to the internet is highly considered a basic amenity that must be provided and stressed the role of ICT in meeting various human needs. Decades before the information and communication technology

(ICT) era, goods, and services were generally purchased by going out to the market place either by exchanging goods for other commodities or exchanging goods or services for other forms of money, however, in recent times with the advances in Information and Communication Technologies (ICTs) most household goods and services can be purchased with a click of a button. The market place is redefined by advances in ICTs and goods and services range from diverse forms of edible and non-edible materials. Household consumption is a key indicator of the trend of economic growth (Akpabio et al 2020 and Chai, 2018). Household spending has been found to have a positive relationship with growing economic conditions, especially when summed up (that is, aggregate household spending). With the introduction of Information and Communication Technologies, consumers are becoming aware of available goods and services, their advantages and this helps consumers to be better positioned to make consumption decisions with increased knowledge.

International Telecommunications Union -ITU (2015) and Brisa, Pawlaka, & Polaka (2017) have shown that internet penetration has grown from 6.3% of the global population to 43%, in addition, mobile broadband, a component of the internet has been shown to have a very dynamic market segment, representing 47% of the global population. Espinosa & Santos (2017) in their study observed that as of 2015, the number of internet users in the world hit a record 3.2 billion users. Etuk et al (2023), Espinosa & Santos (2017) and Akpabio et al (2018) have viewed that people use ICTs every day when for making phone call, watching the television, making financial transactions and checking e-mail. In other words, the use of ICTs is becoming an integral part of human existence, our lives, and our survival. Dube (2017) indicated that the digital natives now find it funny and frustrating to study or learn without Information and Communication Technology.

ICT since its development and introduction into human society has affected several aspects of our lives; ranging from education, health, and economics (Mihajlovic, Colovic, & Beran 2008). Okoroma et al (2023) also indicated that ICTs play a great role as a process catalyst in the market and enhances the process of communication and information sourcing. It makes for easy coming together of individuals, ideas, and thoughts through the virtual platform it creates. Thus, it improves and increases marketing opportunities through enhanced transparency in information. Signe (2018) pointed out that Nigeria, Egypt and South Africa will by 2030 have the largest consumers' market and further indicated that African consumers' population is expected to hit a record 1.7 billion persons by 2030. Signe (2018) went further to cite that household consumption in Africa increased annually at the rate of 3.9 per cent from 2010 to 2015; nevertheless, it was observed that household spending was relatively stagnant. It is no more news that consumers no longer go to stores mainly to shop, (Narumitsu, Michiko, Masaaki & Shota, 2015); instead, they make use of alternative options to gather information, order and receive goods and services anywhere at a convenient time. The changes in the retail environment encompassing digital shift, service shift and power shift to the demand side has shifted the focus of ICT activity from businesses to consumers (Narumitsu *et al.*, 2015). In addition, a prediction has it that in the near future; there would be an increase in services chosen by consumers. These consumers are members of households and the goods and services consumed directly or

indirectly affect the household.

Researches have yet to thoroughly examine how consumers in different areas of Rivers State utilize information and technology for purchasing household goods and services, potentially missing crucial insights into diverse consumer behaviors and preferences. There is a lack of in-depth analysis regarding how varying socioeconomic statuses influence the utilization of information and technology among consumers in Choba, Rivers State, Nigeria.

This study was aimed to assess consumer utilization of Information and Communication Technology for consumption of household goods and services in Choba, Rivers State, Nigeria. It determined the socioeconomic characteristics of the respondents, type of Information and Communication Technology used by the respondents, respondents preference to the use of Information and Communication Technologies, mode of payment of goods and services consumed from online by the respondents, goods and services consumed by the respondents and the frequency, ways the consumption of goods and services through ICT enhance family living, constraints to the use of ICT for consuming household goods and services and respondents perception of respondents to online and online avenues for the consumption of goods and services.

METHODOLOGY

The study was conducted at Choba (the University of Port Harcourt and environs) Rivers State , Nigeria. A simple random sampling technique was adopted for the study. A hundred respondents were selected and a questionnaire administered to collect data based on the objectives of the study. The data collected was analyzed using descriptive and inferential statistics.

RESULT AND DISCUSSION

Table 1: Socio-economic characteristics of the respondents

s/n	Item	Frequency	Percentage	Mean
1	Sex			
	Male	54	54.0	
	Female	46	46.0	
2	Age			
	Below 21	6	6.0	
	21 - 30	59	59.0	
	31 - 40	22	22.0	
	41 - 50	7	7.0	
	51 -60	4	4.0	
	61 - 70	2	2.0	
3	Marital status			
	Single	65	65.0	
	Married	35	35.0	
4	Level of education			
	No Formal Education	0	0.0	
	Primary Education	4	4.0	
	Secondary Education	33	33.0	
	Tertiary Education	63	63.0	
	Vocational Education	0	0.0	

5	Highest level of educational qualification			
	First School Leaving Certificate	14	14.0	
	Senior Secondary School Certificate (or equivalence, WASSCE, GCE)	24	24.0	
	Bachelor' s Degree (or equivalence HND)	60	60.0	
6	Household size			
	1 - 5	60	60.0	
	6 - 10	38	38.0	
	11 - 15	2	2.0	
7	Major Occupation			
	Farming	14	14.0	
	Non-farming	75	75.0	
	Both	11	11.0	
8	Which category do you belong			
	Household good and service consumer	60	60.0	
	household good and service marketer	4	4.0	
	Both	36	36.0	
9	Select the Income range earned monthly			
	1 - 20,000	35	35.0	
	21,000 - 40,000	25	25.0	
	41,000 - 60,000	9	9.0	
	61,000 - 80,000	2	2.0	
	81,000 - 100,000	9	9.0	
	101,000- 120,000	5	5.0	
	121,000 - 140,000	10	10.0	
10	Which network connection do you use to access the internet			
	MTN	56	56.0	
	Glo	18	18.0	
	Etisalat	8	8.0	
	Airtel	18	18.0	
11	Are you physically challenged			
	Yes	3	3.0	
	No	97	97.0	
12	How much do you spend on data subscription (per month)			3032.51
13	Estimate the amount you spend on goods and service online (per month)			94,546.25

Source: Field survey 2023

n = 100

The result from Table 1 shows that most of the respondents were male (54.0%), were within 21 - 30 years of age (59.0%) and 65.0% of them were single. A majority (63.0%) had tertiary education and indicated they have used Information and Communication Technology for 5 years and 6 months. The respondents (60.0%) had a household size of 1 - 5 persons, engaged majorly in non-farming activities (75.0%) and were mainly household goods and service consumers (60.0%).

The respondents, (60.0%) earned between ₦1 and ₦40,000 per month and used the MTN network as the preferred subscription network. This is followed by Glo and Airtel having 18% of the response each. The respondents indicated they spend approximately ₦3,000 on internet subscriptions and ₦95,000 on purchase of goods and services online per month.

The result from table 1 shows that most of the respondents are adult since they fall within the age bracket of 21 – 40 accounting for 81 per cent of the respondents. This suggests that the households within the study area are mainly adults, predominantly students. As students or adults, it is understandable that their monthly income ranged from ₦1 - ₦40, 000. This income range does not add up to the average monthly data subscription (₦3,032.51kobo) and cost of goods and services purchased online (₦94,546.25kobo). This implies that the respondents may have other informal source(s) of income that help them to sustain themselves.

Type of ICT used by the respondents

Table 2: Type of ICT used by the respondents

s/n	Type of ICT**	Frequency (yes)	Percentage (yes)
1a	Radio	17	17.0
B	Telephone (land line)	8	8.0
C	Mobile phone (non smart)	17	17.0
D	Smartphone	98	98.0
E	Whatsapp	70	70.0
F	Facebook	63	63.0
G	Twitter	20	20.0
H	LinkedIn	17	17.0
I	Television	14	14.0
J	Laptop	55	55.0
2	How much time do you spend using ICTs in a day (in hours)		
	less than 1hour	24	24.0
	1 - 3	36	36.0
	4 - 6	17	17.0
	7 - 9	15	15.0
	10 - 12	4	4.0
	13 - 15	4	4.0
	above 15	0	0.0

Source: Field survey, 2023** multiple response recorded

The majority of the respondents preferred to use smartphone (98.0%), Whatsapp (70.0%), Facebook (63.0%) and laptop (55.0%) to consumer or order for goods and services. Sixty percent (60.0%) of the respondents spend less than three hours using Information and Communication Technologies. Narumitsu *et al.*, (2015) indicated that in the area of mobile technology and internet, great advances have been made in Information and Communication Technology. They went further to explain that these advances (on internet, smart device and network) have had a great impact on the way consumers shop. In his research on 21st century students' educational ICT preference, observed that students preferred emerging technologies such as Google as compared to the local LMC in Zimbabwe, according to his studies, emerging technologies allow the respondents space and time flexibility and ensures less dependence on the internet.

Table 3: Respondents preference to the use of Information and Communication Technologies

s/n	Type of ICTs	HP	P	SP	NP	Mean	Remark
1	Radio	6	12	2	80	1.44	Not preferred
2	Telephone (land line)	0	3	14	83	1.20	Not preferred
3	Mobile phone (non smart)	14	11	17	58	1.81	Not preferred
4	Smart phone	63	12	4	21	3.17	Preferred
5	Whatsapp	58	13	4	25	3.04	Preferred
6	Facebook	29	25	12	34	2.49	Not preferred
7	Twitter	16	8	25	51	1.89	Not preferred
8	Websites	30	17	2	51	2.26	Not preferred
9	Television	9	26	7	58	1.86	Not preferred
10	Laptop	27	13	13	47	2.20	Not preferred
11	LinkedIn	2	23	2	73	1.54	Not preferred
12	Instagram	13	12	19	56	1.82	Not preferred

Source: Field survey, 20123 mid-point = 2.5
Highly Preferred = HP, Preferred = P, Slightly Preferred = SP, Not Preferred = NP

The results show that the respondents preferred to use smartphone (3.17) and Whatsapp (3.04) to consume goods and services. This is a clear indication of the development of increased access to ICTs with little usage (Dube, 2017). Out of the ICTs itemized only two were preferred by the respondents. The most trending ICT in use was the Whatsapp, this may be due to ease of use of its features which are similar to Short messaging service (SMS) messaging, except that internet is required for it to function in addition to other features.

Table 10: Pearson moment correlation between socioeconomic characteristics and ICT.

		Television	Mobile phone
Age	Pearson correlation	-.313	
	Sig. (2-tailed)	.049	
	N	100	
Marital status	Pearson correlation	-.398	
	Sig. (2-tailed)	.011	
	N	100	
Occupation	Pearson correlation		.340
	Sig. (2-tailed)		.040
	N		100

There was positive correlation between occupation and mobile phone ($r = .340$, $n = 100$, $p < 0.05$) implying the use of mobile phones increases with occupation. Therefore, the better the occupation the more the use of mobile phones for consumption of goods and services. A negative correlation was observed between age and television ($r = -.313$, $n = 100$, $p < 0.05$). This shows that as people get older they watch / use less television. This implies that younger people get more information on goods and services from television than older adults. This is seen in the fact that older adults watch more of news on television than people of younger age who are drawn to advertisements on television. Also a negative correlation was observed between marital status and television ($r = -.398$, $n = 100$, $p < 0.05$). As people are married, their responsibility increases with a corresponding decline in the use / watching of television.

CONCLUSION AND RECOMMENDATIONS

Innovation in the use of Information and Communication Technology (ICT) is gaining grounds as can be seen from the result of the study. The respondents used ICTs to consume goods and services, however, the frequency of consumption of varied among goods and services consumed Household electrical appliances phones, clothes, shoes and mobile phone vouchers (credit recharge) were the most consumed goods and service using ICT. When rated on a scale, the respondents indicated that consumption of goods and services via ICT improves time spent with the family, improves access to producers of goods and services, and makes goods and services easily available as reasons for using ICT. There was positive correlation between occupation and mobile phone, negative correlation was observed between age and television and a negative correlation was observed between marital status and television. Erratic and poor electricity supply and poor internet connection were the major constraints limiting the use of ICT for consumption of household goods and services. It was recommended that Government and stakeholders should invest more on improving ICT infrastructure such as solar energy to avoid erratic and poor electricity supply

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