

Information Storage and Dissemination by Small and Medium Scale Entrepreneurs in Zaria and Kaduna.

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ABSTRACT

This paper discusses information storage and dissemination by small and medium scale entrepreneurs in Zaria and Kaduna, Nigeria. The study is aimed at ascertaining the extent to which the storage and dissemination of business information in the two towns enhances business transactions. Response data was acquired with the aid of questionnaire in the two cities. Statistical data representations in frequencies and in simple percentages were used to show and analyze the distributions of the entrepreneurs' responses. Also, Chi-Square distribution at 0.05 significance-level was used to test a hypothetical statement based on the research questions and the acquired data. Results show that a majority, 56%, of the entrepreneurs in both Zaria and Kaduna, store business information in books. Results also show that about 53% of the entrepreneurs use word of mouth in the dissemination of their business information. The tests on hypothesis stated, shows that there are significant differences between the business entrepreneurs in storage and dissemination of business information in both Zaria and Kaduna.

(Keywords: entrepreneurs, small business, information storage, dissemination, chi square)

INTRODUCTION

Indigenous business entrepreneurs in most developing countries need help in the area of information management with respect to its storage and dissemination such that they can enhance their businesses transactions. In Nigeria, information centers such as Industrial Development Centers (IDC) have been established across the Federation. Nevertheless, there is a high mortality rate of both old and new businesses in the country. The small and medium enterprise (SME) in Nigeria is an important drive

in every stage of its growth and economic development. SME fills the gap left by reduced Foreign Direct Investment (FDI) through job creation, stimulating economic growth and alleviating consensus among public policy makers.

According to Zahao (1990) academics and researchers hold that entrepreneurship is a vital route to economic advancement for developing economies. Most small industrial sectors In Nigeria mainly comprises household units which carry out diverse types of industrial activities such as the making of local fabrics, ceramic making, tailoring, weaving, shoemaking, corn milling, etc., in the traditional manner. The preponderance of vast numbers of the small scale industries in the country suggests that the situation offers substantial opportunity for the intensive development and improvement with appropriate injections of technology, current business information, improved management and efficient marketing method.

Business entrepreneurs are constantly in competition with each other for optimum success (Bikika, 2002). There is an urgent need to study the way the entrepreneurs store and disseminate information. Information plays a vital role in the operation and eventual success of any business. Therefore the storage and dissemination of it are vital ingredients for achieving goals in each sector of any business. Zhao (1990) stated that the studies on information management in SME of developing countries have revealed that there are gaps in the demand and management of business information. Business information encompasses the range of published and unpublished materials which are available to the businessman to aid him in reaching commercial judgments and decisions. Campbell (1987) holds the view that business information assists the entrepreneur in buying and selling of goods and services and the application of economic and

managerial techniques. Harrison (1999) stated that information is essential to any organization as it directly support business activities at both the operational and management levels.

According to Chen and Herson (1982) information is all knowledge, ideas, facts, data, and imaginative works of mind which are communicated formally and or informally in any format. Uhegbu (2001) holds the view that information is a conveyor of knowledge, a change agent, a reinforcement of ideas and opinion. It is therefore expected that business entrepreneurs should store and disseminate information as a means of playing functional roles in the society.

O'Brien (2003) reported that information supports every aspect of business activities. For example marketing managers need information about sales performances and sales trends. Production managers need information concerning raw materials, and production processes. Therefore, information provides the big, medium and small organizations with knowledge to support their decision-making responsibility in each functional area. The information storage and dissemination of small business industries are related to day to day problems, and facts are needed to make decisions at short notices. This means that business information plays a vital role in the success of any business organization.

Information Storage and Dissemination

Information management is a function basic to every business. Glencoe Professional Communication Series (2003) stated that it is the receiving, storing and organizing of all relevant business information and communication. Nzotta and Alegbeleye (1992) posited that information management is the means through which organization maximize its efficiency in planning, collection, organization, use, control, dissemination and dispossession of information through which it ensures that the value and potential value of that information are exploited in full extent.

William and Raymond (1968) pointed out that keeping good records is good and lawfully necessary. Questions which may be raised in businesses can be accurately answered when written records of all business proceedings are kept. By recording business history, the owner can profit from mistakes and avoid costly errors in

the future. A chronicle of the good and bad things that occur in a business usually permits evaluation, improvement and a good chance for personal and financial success. Records, whether in the form of archives or not are information media which are created in the course of business by an organization and kept because they are useful in the business. As archives, the records are meant for appraisal tests and reference. Generally, records are placed in an archival repository for a permanent retention.

There was a time when the only storage a business required was a filing cabinet and the odd cardboard box or two. But increasing reliance on electronic data processing has seen demand for fast, reliable and secure storage mostly on magnetic media, grow exponentially in recent years (<http://www.opera.com>).

O'Brien (2003) states that information storage is maintaining records on customers, employees and products. The quality of any data stored in an information system must also be maintained by a continual process of correcting and updating activities. Storage is a basic system component of information system. Storage is the information system in which data and information are retained in an organized manner for later use. This facilitates its later use in processing or its retrieval as output when needed by users of a system. Many web stores also increase their market reach by being part of web banner advertising exchange programs with thousands of other web retailers.

Glenceo (2003) observed that successfully organizing information in a system means crating a system using both physical and virtual information that results to information being safely stored. Safe storage enables small and medium scale entrepreneurs to maintain a document's integrity for later use.

External communication reaches out to the customer to make them aware of product or service and to give them a reason to buy. This type of communication includes brochures, various forms of advertising, contact letters, telephone calls, web sites and anything else that makes the public aware of what is available. Image is extremely important in external communication.

Elendu (1988) postulated that filing is an important business activity which provides an

organized system of classifying and storing records, in a definite arrangement that enables facts to be found easily when needed. The storage of information is regarded as a vital resource for an individual to function effectively in a society. Therefore entrepreneurs in Nigeria require the storage of information to function effectively.

Effective storage and timely dissemination of business information fosters wealth creation, poverty eradication, job creation, education and global competitiveness. It is generally acknowledged that the application of Information Communication Technology (ICT) in storage and dissemination of business information has the capacity to expand opportunities for trade; impact on economic growth, productivity, and efficiency to create employment, reduce poverty, close income gaps and improve the quality of life in general (Okore 2004).

The storage and dissemination of business information are basic functions in every business transaction. However, one of the greatest challenges facing entrepreneurs is how to effectively store and economically control and utilize an ever expanding information base. As a result of the technological and social changes in government and business, the need for storage and dissemination of records in various forms and formats becomes very important so that the right information will be gotten on time and in the right format. The storage of both internal and external information pertaining to any business is a vital element of managing the business.

Basically in business environment, information concerning people, money, material, machines, land facilities energy and information require storage. On the other hand, information about the output in business such as products, services, payments, contributions and information (O'Brien, 2003) may need to be disseminated appropriately to those in need of them.

It is expected the all the usable business information should be adequately stored and all the information that are needed by outsiders in the business for the promotion of the entrepreneurs activities should be cordially disseminated. Thus, in most developing countries, there is a prevalent challenge on storage and dissemination of business information. Pieces of necessary information gathered should be stored on time and in the right

format in order to guarantee its safety and easy retrieval.

The small and medium enterprises will properly function as important economic drivers in the growth and development of economies when the challenges of storage and dissemination of the information is put to constant check (Rufaro and Dick, 2008). Previous observations show that many businesses in Nigeria rise and crumble and this has become a course for worry. According to Adedotun (2008), the Nigerian SME in the past few years were notably characterized by slow rate of growth in industrialization, unemployment especially in the cities and deterioration in the rural areas.

The business environment generate a vast amount of information from competitors, suppliers, consumers, the government and other sources especially with the establishment of tertiary institutions within Zaria and Kaduna metropolis. The storage, use and dissemination of business information by the entrepreneurs are essentially cardinal for developmental changes in Northern Nigeria. However it is expected that every entrepreneurs in the two towns should know the right means of storing and disseminating information in their business environment and cope with the fast changing trend in the present technological and computer era. This will help to promote both urban and rural development.

This research is meant to answer the following questions:

1. What are the medium used by the entrepreneurs in Zaria and Kaduna in the storage of business information available to them?
2. How do the business entrepreneurs in Zaria and Kaduna differ in their dissemination of business information?

HYPOTHESIS

“There is no significant difference between the entrepreneurs in Zaria and Kaduna in the dissemination of business information”.

This paper is therefore aimed at:

1. Determining the medium with which entrepreneurs in Zaria and Kaduna store the business information available to them.
2. Determining how the various business entrepreneurs in Zaria and Kaduna disseminate business information.

METHODOLOGY

Survey method was adopted in this study. This method was chosen because it is concerned with the collection of data for description and interpretation of existing conditions, prevailing practice, beliefs, and attitudes or an ongoing process in the target population (Ndagi, 1984). Survey method allows the researcher to gather information on a targeted population without undertaking a complete enumeration.

The population for this study consisted of small and medium scale entrepreneurs in Zaria and Kaduna metropolis. A sample of entrepreneurs of nineteen businesses in Zaria and Kaduna metropolis namely business centers, fast food shops, book shops, computer shops, medical/pharmacy shops, leather goods and services, building material dealers, motor parts dealers, technicians, printers, poultry farmers, bakeries, salons, provision stores, boutiques and general wears, tailors, photographers, electronic shops, and furniture workshops were used for this study.

Random sampling technique was used in the sampling of four hundred and fifty (450) entrepreneurs in Zaria and Kaduna respectively. Questionnaire, interview, observation and documentary were used as instruments for data collection in the study areas. This is in accordance with the view of Akuezuilo (1993) whereby he postulated that the survey researchers utilize instruments such as questionnaire, interview, and observation in investigations.

The questionnaire prepared was given to entrepreneurs. Its design was meant to reveal the bio data, detail of the respondents' business transactions, information acquisition and management. Interview and observations were used alongside in the data collection in order to complement the questionnaire in some salient matters. Both interview and observation were used in the data collection. A total of 376

questionnaires from Zaria and 370 questionnaires from Kaduna were adequately filled and used for the data analysis.

DATA ANALYSIS AND FINDINGS

Statistical techniques used in the analysis of the data include; frequency distribution, simple percentages and chi-square (χ^2) test.

Tables 1a and 1b show the distribution of the entrepreneurs in Zaria and Kaduna, respectively with regards to the different medium of information storage. It is observed that 216 (57%) and 205 (55%) of the entrepreneurs in Zaria and Kaduna respectively, process and store the business information they generate by writing it down in books. However, interview and observations made during the research show that, these written documents are often not kept properly, especially when they are filled. They are either misplaced or usually not kept in good shape.

The use of computer or paper files for the storage of information by the entrepreneurs is very poor. The tables show that 10% or less of the entrepreneurs use computer or paper files for their information storage. Therefore, about one tenth of the entrepreneurs have the privilege of very easy retrieval of their stored information in hard disc or filing as posited by Elendu (1998). However, 20% of the entrepreneurs in both Zaria and Kaduna claim that they store business information off heart.

The implication of this is that, there is high tendency of them forgetting completely and not refer to that information after some months for planning and effective running of their businesses. Keeping records is good in the sense that, it accurately answers legal and financial questions which may be raised by government agencies, banks, customers and employees (William and Raymond, 1968). The appropriate answers to the questions easily come when the written records of all business proceedings are well stored. Therefore the proper record of business history by the owner can grant the entrepreneur profit from mistakes and avoid costly errors in the future through the chronicle of the good and bad things that occur in a business and permits evaluation, improvement and a good chance for personal and financial success.

MEANS OF INFORMATION STORAGE BY BUSINESS ENTREPRENEURS IN ZARIA AND KADUNA

Table 1a: Means of Information Storage by Business Entrepreneurs in Zaria.

BUSINESS ENTREPRENEURS IN ZARIA	Computer Hard disk		Off heart		In Books		In Paper file	
	F	%	F	%	F	%	F	%
Business Center	10	2.66%	4	1.06%	30	7.98%	3	0.80%
Poultry Farmers	3	0.80%	1	0.27%	17	4.52%	3	0.80%
Upholstery Makers	0	0.00%	6	1.60%	8	2.13%	0	0.00%
Hair Dressers	0	0.00%	15	3.99%	25	6.65%	4	1.06%
Dealers on Computers and their Accessories	5	1.33%	3	0.80%	5	1.33%	2	0.53%
Building Material Dealers	3	0.80%	5	1.33%	15	3.99%	2	0.53%
Bakers	1	0.27%	2	0.53%	6	1.60%	1	0.27%
Technicians	2	0.53%	4	1.06%	15	3.99%	1	0.27%
Leather goods and Services	0	0.00%	8	2.13%	4	1.06%	0	0.00%
Medical/Pharmaceutical Services	5	1.33%	2	0.53%	12	3.19%	1	0.27%
Printers	8	2.13%	2	0.53%	9	2.39%	1	0.27%
Provision Retailers	0	0.00%	8	2.13%	6	1.60%	0	0.00%
Photographers	4	1.06%	2	0.53%	4	1.06%	5	1.33%
Book and Stationeries' Dealers	2	0.53%	3	0.80%	9	2.39%	2	0.53%
Tailors	0	0.00%	4	1.06%	10	2.66%	0	0.00%
Fast Food Dealers	3	0.80%	2	0.53%	6	1.60%	1	0.27%
Electronic Dealers	2	0.53%	1	0.27%	12	3.19%	1	0.27%
Dealers on Boutiques	2	0.53%	4	1.06%	9	2.39%	1	0.27%
Motor Parts Dealers	2	0.53%	2	0.53%	14	3.72%	2	0.53%
TOTAL	52	13.83%	78	20.74%	216	57.45%	30	7.98%

Table 1b: Information Storage by Business Entrepreneurs in Kaduna.

BUSINESS ENTREPRENEURS IN KADUNA	Computer Hard Disk		Off Heart		In Books		In Paper File	
	F	%	F	%	F	%	F	%
Business Center	18	4.86%	7	1.89%	20	5.41%	3	0.81%
Poultry Farmers	1	0.27%	2	0.54%	10	2.70%	5	1.35%
Upholstery Makers	0	0.00%	3	0.81%	14	3.78%	5	1.35%
Hair Dressers	0	0.00%	13	3.51%	13	3.51%	0	0.00%
Dealers on Computers and their Accessories	7	1.89%	5	1.35%	9	2.43%	1	0.27%
Building Material Dealers	1	0.27%	1	0.27%	15	4.05%	3	0.81%
Bakers	0	0.00%	3	0.81%	11	2.97%	0	0.00%
Technicians	0	0.00%	5	1.35%	6	1.62%	4	1.08%
Leather goods and Services	0	0.00%	6	1.62%	5	1.35%	0	0.00%
Medical/Pharmaceutical Services	3	0.81%	3	0.81%	9	2.43%	5	1.35%
Printers	2	0.54%	5	1.35%	10	2.70%	5	1.35%
Provision Retailers	0	0.00%	10	2.70%	10	2.70%	0	0.00%
Photographers	2	0.54%	2	0.54%	5	1.35%	3	0.81%
Book and Stationeries' Dealers	2	0.54%	3	0.81%	5	1.35%	1	0.27%
Tailors	0	0.00%	5	1.35%	13	3.51%	1	0.27%
Fast Food Dealers	3	0.81%	1	0.27%	16	4.32%	0	0.00%
Electronic Dealers	1	0.27%	2	0.54%	16	4.32%	1	0.27%
Dealers on Boutiques	0	0.00%	3	0.81%	8	2.16%	0	0.00%
Motor Parts Dealers	1	0.27%	2	0.54%	10	2.70%	6	1.62%
TOTAL	41	11.08%	81	21.89%	205	55.41%	43	11.62%

Results also show that majority 53% and 54% of the entrepreneurs in Zaria and Kaduna respectively disseminate their business information verbally and through GSM (Figure 1). Internet which is a modern means of advertisement globally is the least used only 1% of the entrepreneurs both in Zaria and Kaduna. Information dissemination contributes immensely to the promotion of sales and creates public awareness about a particular product which results in turn increases sales and profits.

Test of Hypothesis

Hypothesis Statement: “There is no significant difference between the entrepreneurs in Zaria and Kaduna in the dissemination of business information”

This hypothesis tests the way Zaria and Kaduna entrepreneurs disseminate their business information.

From the table of the critical values, the critical value of Chi-Square at $\alpha = 0.05$ and a d.f. = 72 is 92.81. In fact the value for $\alpha = 0.005$ is 106.65. The calculated Chi values of 127.34 and 125.54 obtained in tables 2a and 2b are greater than the chi-square critical (92.81) and 106.65. Therefore

the hypothesis of no difference between the entrepreneurs in their channels of information dissemination is rejected. In other words, the chi-square values (127.34 and 125.54) with degree of freedom (72) are feasible at probability of 0.00063 and 9.6135E-05 are both less than 0.05 with which the hypothesis was proposed. This justifies the rejection of the hypothesis.

This implies that the ways business entrepreneurs disseminate information in Zaria are dependent on their type of businesses. In other words, there is a relationship between the channels of information dissemination and the type of business engaged in by the business entrepreneurs. For instance, most of the entrepreneurs who have business centers and hair dressers in Zaria are relatively better in the dissemination of information using handbills, verbal and GSM channels than in other businesses. Tables 2a and 2b show that bakers, leather goods and fast food shops record the poorest in the use of information dissemination channels both in Zaria and Kaduna. In Kaduna, the entrepreneurs most rarely use internet for their business information dissemination. In fact, very few respondents who are mainly graduates use internet as one of the means of their information dissemination.

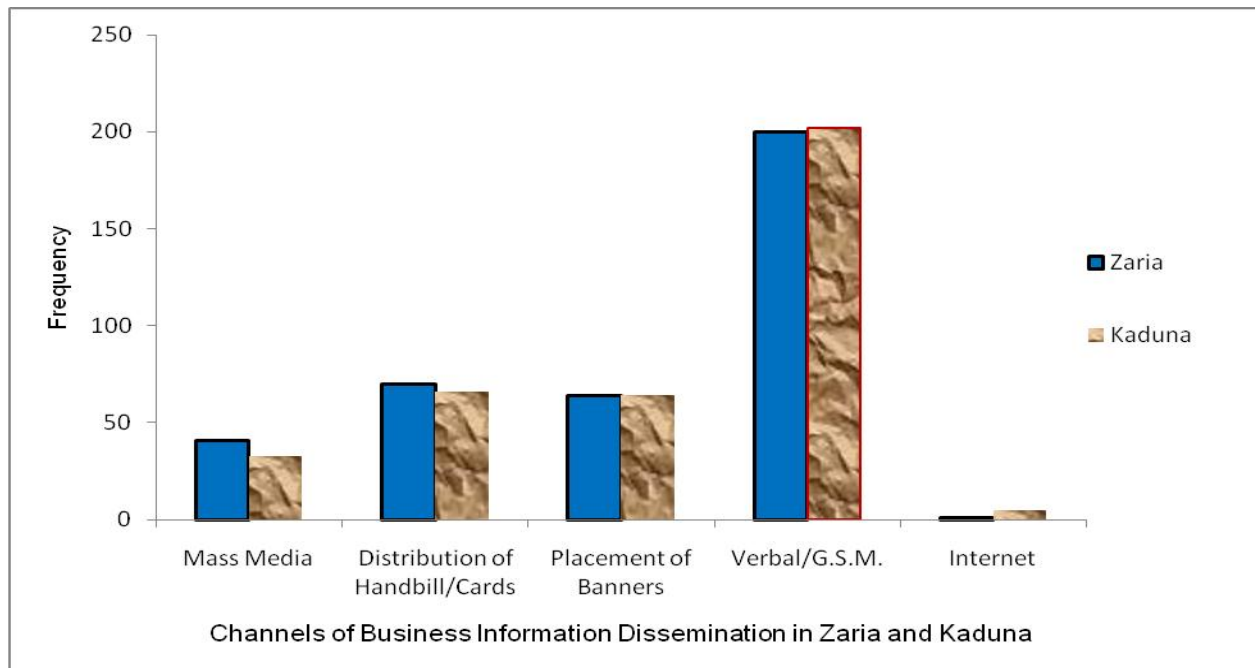


Figure 1: Channels of Business Information Dissemination in Zaria and Kaduna.

Table 2a: Calculation of Chi-Square (χ^2) from the Contingency of the Channels of Information Dissemination in Zaria.

Category of Business	Mass Media		Distribution of Hand Bills/Cards		Placement of banners		Verbal/GSM		Internet	
	f_o	χ^2	f_o	χ^2	f_o	χ^2	f_o	χ^2	f_o	χ^2
Business Centers	3	0.88	11	0.58	18	12.50	15	4.00	0	0.13
Poultry Farms	4	0.73	2	1.36	2	1.06	16	0.82	0	0.06
Furniture Workshops	0	1.53	1	0.99	0	2.38	13	4.14	0	0.04
Salons	0	4.80	17	9.47	7	0.03	20	0.50	0	0.12
Computer Shops	5	6.92	2	0.22	2	0.12	6	0.49	0	0.04
Building Material Dealers	3	0.03	2	1.51	1	2.49	19	2.45	0	0.07
Bakers	2	0.76	2	0.01	3	0.99	3	1.01	0	0.03
Technicians	2	0.07	3	0.29	6	1.36	11	0.04	0	0.06
Leather Goods and services	0	1.31	0	2.23	1	0.53	11	3.34	0	0.03
Medicine/Pharmacy Shops	3	0.31	2	0.80	3	0.05	12	0.17	0	0.05
Printers	3	0.31	4	0.02	3	0.05	10	0.04	0	0.05
Provision Retailers	1	0.18	2	0.14	2	0.06	9	0.32	0	0.04
Photographers	2	0.08	6	3.68	2	0.12	5	1.11	0	0.04
Bookshops	2	0.04	2	0.32	1	1.09	11	0.73	0	0.04
Tailors	0	1.53	2	0.14	4	1.10	8	0.04	0	0.04
Fast Food Shops	2	0.37	2	0.02	4	1.88	3	1.79	1	29.37
Electronic Shops	4	2.92	5	1.37	1	1.09	6	0.74	0	0.04
Boutiques	2	0.04	3	0.00	2	0.19	9	0.03	0	0.04
Motor Parts Shops	3	0.31	2	0.80	2	0.58	13	0.52	0	0.05
Total	41	23.09	70	23.98	64	27.67	200	22.29	1	30.33

Key: $\chi^2 = \frac{(f_o - f_e)^2}{f_e}$

f_o = Observed Frequency

f_e = Expected Frequency = $\frac{(R_i \times C_j)}{N}$

R_i = Sum of f_o in i^{th} row

C_j = Sum of f_o in j^{th} column

N = Total Observed Frequency

Total calculated $\chi^2 = 127.3598$

Critical $\chi^2 = 92.81$

Degree of Freedom (d.f.) = $(c - 1) \times (r - 1) = 72$

c = Number of column

r = number of row

Calculated α value (Probability) = 0.00063

Table 2b: Calculation of Chi-Square (χ^2) from the Contingency of the Channels of Information Dissemination in Kaduna.

Category of Business	Mass Media		Distribution of Hand Bills/Cards		Placement of banners		Verbal/GSM		Internet	
	f_o	χ^2	f_o	χ^2	f_o	χ^2	f_o	χ^2	f_o	χ^2
Business Centers	2	1.22	15	4.84	16	7.14	15	4.79	0	0.65
Poultry Farms	1	0.23	2	0.46	4	0.25	11	0.14	0	0.24
Furniture Workshops	1	0.47	1	2.18	1	2.07	19	4.07	0	0.30
Salons	0	2.32	5	0.03	3	0.50	18	1.02	0	0.35
Computer Shops	1	0.47	6	1.10	4	0.01	9	0.75	2	9.75
Building Material Dealers	7	15.25	3	0.09	1	1.75	9	0.34	0	0.27
Bakers	1	0.05	2	0.10	3	0.14	8	0.02	0	0.19
Technicians	0	1.34	1	1.05	4	0.76	10	0.40	0	0.20
Leather Goods and services	0	0.98	1	0.47	0	1.90	10	2.66	0	0.15
Medicine/Pharmacy Shops	1	0.34	2	0.69	2	0.62	15	1.53	0	0.27
Printers	2	0.00	4	0.00	6	1.27	10	0.34	0	0.30
Provision Retailers	1	0.34	1	1.85	2	0.62	15	1.53	1	1.97
Photographers	1	0.00	5	3.82	3	0.41	3	1.93	0	0.16
Bookshops	1	0.00	3	0.55	2	0.00	5	0.17	0	0.15
Tailors	0	1.69	2	0.57	1	1.59	16	3.05	0	0.26
Fast Food Shops	2	0.03	3	0.09	6	1.87	9	0.34	0	0.27
Electronic Shops	5	5.80	6	1.66	2	0.62	6	2.22	1	1.97
Boutiques	2	1.06	2	0.00	2	0.00	5	0.17	0	0.15
Motor Parts Shops	5	6.45	2	0.57	2	0.50	9	0.18	1	2.15
Total	33	38.05	66	20.11	64	22.01	202	25.62	5	19.75

Key:
$$\chi^2 = \frac{(f_o - f_e)^2}{f_e}$$

f_o = Observed Frequency (weighted)

$f_e = \text{Expected Frequency} = \frac{(R_i \times C_j)}{N}$

R_i = Sum of f_o in i th row

C_j = Sum of f_o in j th column

N = Total Observed Frequency

Total calculated $\chi^2 = 125.54$

Critical $\chi^2 = 92.81$

$(d.f.) = (c - 1) \times (r - 1) = 72$

Degree of Freedom = 72

c = Number of column

r = number of row

Calculated α value (Probability) = 9.6315E-05

This could be attributed to the reasons most of them gave in response to the research questionnaire. While some respondents pointed to the fact that the turnover in their daily transactions are quite good, others' responses pointed to the fact that they have already made their customers from the onset of their business therefore advertisement of their businesses is not a critical challenge to them. Therefore, the means of information dissemination by the entrepreneurs in Zaria and Kaduna is relatively dependent on the type of business the entrepreneurs are into.

Based on similar test of hypothesis, results also show that the ways small and medium scale business entrepreneurs store business information which they have acquired for optimum performance are dependent on their various types of businesses. In other words, there is a relationship between the means of information storage and type of business done by the Zaria Kaduna business entrepreneurs.

CONCLUSION

Based on the foregoing investigation, data analysis and the research findings on information storage and dissemination in the two metropolises, the following conclusions are drawn:

- i. About 56% of the entrepreneurs store their business information in books in both Zaria and Kaduna.
- ii. About 54% of respondent disseminate their business information through the use of verbally and G.S.M.
- iii. The result of the hypotheses tested showed that there are significant differences between the business entrepreneurs in both their storage and dissemination of the information generated in their various businesses.

This research on information storage and dissemination among small and medium scale entrepreneurs in Zaria and Kaduna metropolis has shown that there is a need for a significant transformation in the storage and dissemination of business information. These needs have posed prevalent challenges to Information Technological development in Nigeria and should be critically considered and resolved by indigenous Information technologists.

Based on the conclusions drawn, it is recommended that a routine awareness campaign should be organized by information scientists in Government sectors and (NGOs) in Zaria and Kaduna on the use of ICT facilities and other contemporary measures in the storage of business information. Secondly, apart from English language, information providers should adopt the use of local dialects and pigeon English for information management campaigns, Jingles and seminars in order to effectively reach business entrepreneurs right from the grassroots. Finally, the use of mass media and database software for advertisement should be encouraged for small and medium scale businesses through promotions such as subsidies.

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