

## ATTITUDES OF EMPLOYEES TOWARDS THE USE OF FISCALISED ELECTRONIC DEVICES IN CALCULATING VALUE ADDED TAX (VAT). A CASE STUDY OF MOTOR INDUSTRY IN ZIMBABWE.

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**Abstract:** *This research sought to find the attitude of motor industry employees in Zimbabwe towards the use of fiscalised electronic devices. The research used a case study approach in which a sample of 50 employees out of a population of 500 was used. The targeted population was nominated from 5 companies and a simple random sampling procedure was employed to come up with 50 sample elements. Questionnaires and interviews were used in triangulation to collect data on the sample. After analyzing the collected data, it was found that fiscalised electronic devices had positively impacted on the motor industry through improvements in tax collection, saves time in tax collection, reduces direct contact between tax collectors and hence minimizes corruption. However, the research also found that employees with low educational level find it difficult to use fiscalised electronic devices because they lack know how on how best to use them. Employees also negatively perceived the use of fiscalised electronic devices because they are not aware of the method and some are just resistant to change that is given all the resources they will reject to use the advanced method.*

**Keywords:** fiscalisation, technology, industry, electronic devices, government, value added tax, computers.

### Related Literature

Fiscalised electronic devices are small machines or mini-computers that are used to determine the amount of Value Added Tax remitted to the government ( Niosi 1994). These devices are designed in such a way that they record each transaction made by an organisation to calculate the amount which is supposed to be remitted to the government as Value Added Tax . Ratus and Nevid (1987) identify four types of fiscalised electronic devices, which comprises of electronic cash registers (ECRs), electronic Tax registers (ETRs), fiscalised printers (FPs) and electronic signature devices (ESDs). Electronic cash registers are devices used by traders to record sales and issue receipts, they also store information such as sales, stocks and can issue reports for example daily sales report. Ratus and Nevid (1987) define electronic tax registers as cash registers with fiscal memory, which is a special, read only memory built into the cash register to store tax information at the time of sale. Cascio (1986) also defines electronic signature device as any electronic means that indicates that a person adopts the contents of an electronic message. This electronic device is used in conjunction with the accounting system to validate documents. Fiscal printers are high speed printers connected to a point of sales terminal or sales computer to store every sale transaction in its memory while it issues receipts to taxpayers.

Burkhardt and Marlene (1994) argue that technological change has become the mode of operation in the 20<sup>th</sup> century business community. As the workplace product transforms from paper to information services, employers and employees scramble to keep abreast of the rising tide of information and the new service opportunities created by the innovations in the technology available to business. However, there are some organisations which are still using the manual method which involves the use of hands instead of computers for determining the value of tax remitted to the government. According to Koohang (1989), companies are resorting to manual method because the cost incurred in the process of acquiring such devices is exorbitant. Statutory requirement in Zimbabwe allows organizations with a turnover of US\$240000 per annum or less not to use fiscalised electronic device which calls for them to continue using the manual methods of remitting VAT to the government. Another reason why some companies are still using the manual method is that they are not aware of the latest methods used in determining the value of tax remitted to the government, and some are just resistant to change that is given all the resources the managers and directors will reject the new technology. Arthur (1990) propounds that individuals with low educational levels may consciously opt not to become familiar with computers (fiscalised electronic devices) due to the challenging nature of the technology. This theory shows us that companies in the motor industry with employees who have low educational

ability will find it difficult to use fiscalised electronic devices.

Cascio (1986) states that electronic device processing methods make use of computers in determining the amount of tax to be remitted to government. He further argues that this method is more reliable and fast as compared to the manual data processing method. Electronic device processing method is less time consuming, less costly, more accurate and faster as compared to the manual data processing method. According to Liden and Adams (1992), older employees usually favor the use of manual methods in determining the value of tax while the younger employees usually favor the use of electronic devices citing the above benefits. They went on to say that younger generations usually have positive attitudes towards the use of electronic devices while older generations have negative attitudes towards the use of electronic devices.

The Motor industry in Zimbabwe spearheaded the introduction of the electronic tax registers and electronic signature devices because they offer unique benefits to traders and revenue authority. Newcomb (1943) states that the benefits of automation include a reduction of fraud, remote access to information, improved collection of statistics and uniform application of tax legislation. The introduction of tax automation minimizes direct contacts between tax collection officers and traders or their agents and hence leads to a reduction of corruption. Further benefits achieved through customs automation include improved reporting, control of file transfer, automation reconciliation of Tax returns declarations and compliance testing of bank files. Paperless declarations and customs automation save time and make it easier to focus on inspecting high-risk consignments. The possibility of submitting Tax returns declarations on-line has in some cases made it possible to reduce the associated fees, in other cases it eliminates the obligatory contracting of customs agents.

Sacks (1991) developed a theory, which advocates that males tend to display positive attitudes towards the use of these devices, regardless of the level of familiarity, while females' attitudes become more positive as the levels of familiarity increases. Brief (1998) argues that females tend to be resistant to the use of fiscalised electronic devices while males accept to the change in the motor industry. In contrast, a survey conducted by Baack and Brown (1991) advocate that older adults indicated that they are less likely than their younger counterparts to use these devices unless there is a perceived need. The same

study attributed the low usage rates to low levels of familiarity. According to Liden and Adams (1992) older individuals do not respond as well to rapid change as their younger counterparts unless the change is gradual overtime. A study by Arthur, Winfred and Hart (1990) identified a positive relationship between educational ability and familiarity with these electronic devices. The authors suggested that employees with low educational ability levels might consciously opt not to become familiar with these electronic devices due to the challenging nature of the technology. A study by Gardner, Dukes and Discenza (1993) identified a positive correlation between experience with electronic devices and attitudes towards them. Not surprisingly, negative experience with these electronic devices correlated with negative beliefs and attitudes towards the technology. Employees with positive experience also espoused positive attitudes towards the devices.

Research study conducted in Kenya by the Kenyan Revenue Authority on the effectiveness of electronic tax registers in the processing of Value Added Tax returns concluded that about 91% of organisations in the motor industry in Kenya have acquired these devices and employees who work for these companies have developed positive attitudes towards these devices. This implies that 9% of companies were still using the manual methods of determining the value of added tax. The research went on to give reasons why some companies were not adapting to the use of electronic devices and the reasons were that some organisations had limited knowledge and resources to adapt to the policy. The research study also concluded that the time filling of the monthly Value Added Tax is attributed to many factors of which electronic tax registers are one of the factors. The research study discovered that about 70% of companies in Kenya supported the idea that electronic Tax registers improves sales audits for the business. The research study also cited that about 66% of employees qualified the use of electronic devices in business as having accrued many benefits to their business, citing the following reasons ranging from: increased efficiency in sales audit, increased sale collection, increased efficiency in stocktaking and easy VAT processing leading to less risk of prosecution. The research also purports that 90% of businesses in Kenya agreed that electronic devices led to timely preparation of reports which led to an increase in returns and fast and efficient ways of processing information. This, by any standards indicates that the Kenyan companies show positive attitudes towards the use of electronic devices.

Koohang (1989) advocates that people of varying backgrounds often have different beliefs and values system which give rise to dissimilar attitudes. Therefore, varying backgrounds and beliefs systems contribute to an individual's attitude towards technology. Belief systems also contribute to attitudes towards innovation adoption rate. Koohang (1989) concludes that there is a positive correlation between favorable attitudes towards new technology and computer familiarity, meaning that employees that are computer familiar will produce positive attitudes towards the use of fiscalised electronic devices and on the other side employees that are not computer familiar will produce negative attitudes towards the use of these devices. A study by Gardner et al (1993) identified a positive 0.75 correlation between experience with computers and beliefs towards them. He concludes that negative experience with computers correlate with negative beliefs and attitudes towards the technology.

Northcraft (1996) postulates that the effects of introducing new technology on attitudes and perception is more positive when employees are given enough time to become familiar with the technology in a risk free environment. Both satisfaction levels and feelings of expertise were positively related to the user's perception of having control of the environment pertaining to interfacing with the technology. In another study carried by Murrell, Audrey and Sprinkle (1993) it was concluded that organisations must address the user's phobia of the technology and allow for a gradual introduction of the innovation.

Anna (2006) carried a research on the attitudes towards the use of electronic invoicing by financial managers in small to medium sized companies in Finland. Questionnaires were used and out to 200 companies only 143 replies were received which showed a 72% respond rate. The respondents were more inclined to have a positive attitude towards electronic invoicing as they were found working for companies having websites that is, they were used in working electronically. The result of the study showed that the attitudes towards electronic invoicing were positive. The study reflected that out of the 143 questionnaires which where responded to 70% favoured the use of electronic devices while 30% were

not familiar with these electronic devices. There were some concerns regarding the cost and safety of using electronic invoicing but the majority of the respondents believe that using electronic invoicing was beneficial.

### **Research Methodology**

The researchers employed a case study approach in order to collect data. The approach allowed the researchers to concentrate on a real scenario, thus proffering solutions to any business that may want to use the stated findings for improving a real situation. The case study also allowed the researchers to give their own judgments and opinions since they were actually interacting with the participants under study.

### **Study Site**

The study was carried out in Harare the capital city of Zimbabwe targeting motor industries. The researcher made use of data obtained from on Croco Motors, Zimoco, Toyota Zimbabwe, Nissan Cloverleaf and Willowvale Motor Industry to represent the total population.

### **Sampling Methodology**

The population of this study was approximated 500 employees. The total sampled units which the researcher used is 50 that is 15 from Croco Motors, 5 from Zimoco, 5 from Toyota ,5 from Nissan Cloverleaf and 20 from Willowvale motor industry . This sample is approximately 10% of the whole population as noted by Best and Khan (2006), a sample equal or above 10% is valid to generalise results for the whole population.

**Table 3.1: Generation of Sample Size**

Strata	Population (N)	Percentage Used	Sample Size (n)
Zimoco	50	10%	5
Nissan Cloverleaf	50	10%	5
Willowvale Motor Industry	200	10%	20
Toyota	50	10%	5
Croco Motors	150	10%	15
<b>Total</b>	<b>500</b>	<b>10%</b>	<b>50</b>

*Source: Raw data*

### Data Collection Instruments

The researcher used questionnaires and interviews as major research tools. Secondary data sources such as books and pastel accounting software were also used as backup to the major research instruments. Best and Khan (1981) state that a questionnaire is a data gathering instrument through which respondents answer questions or respond to statements in writing. The method is frequently used where factual information is desired. The researchers' questionnaire comprised of 7 closed questions and 1 open-ended question which summed up to 8 questions. Closed questions were used because comparison is made easier and takes minimum time to complete. To have a thorough understanding of the attitudes of employees towards the use of fiscalised electronic devices, one open-ended question was asked to capture what individuals think about the subject under investigation.

The researchers justified the use of questionnaire as an instrument of data gathering because;

- Anonymity- secrecy and confidentiality was regarded, no names or identification was

needed to be attached to the questionnaire disbursed.

- Quick results- the questionnaire facilitated for results to be analyzed quickly and more efficiently.
- Cheaper to administrate- only transport cost was incurred in the process of administering the questionnaires to the respondents.

However, some setbacks were noted in using the questionnaire. Trochin (2006) argues that questionnaires have a high rate of non-response as compared to other data gathering instruments. Questionnaires have an element of subjectivity that they may hinder probing further.

To overcome these limitations the researchers carried out a pilot study to check the validity and reliability of the questionnaire. The researchers also used formal interviews to compliment the questionnaire. Interviews were also held to complement information which was solicited through the use of the questionnaire. Saunders (2003) asserts that interview involve direct personal contact between the researcher and the participants.

The use of interviews was a good way of obtaining information for the research. During the interviews probing further was made easier and the researcher directs the interviews in a manner that best suit the research question. More detailed background information was obtained because follow up questions were asked and a relatively large amount of information was captured in a relatively short time. Secondary data was also used to collect data from the selected companies. Information collected included the total

output produced per annum and the total amount of Value Added Tax remitted per annum. This method saved time because there was no need for field work also the data was found at one place thereby reducing travelling expenses.

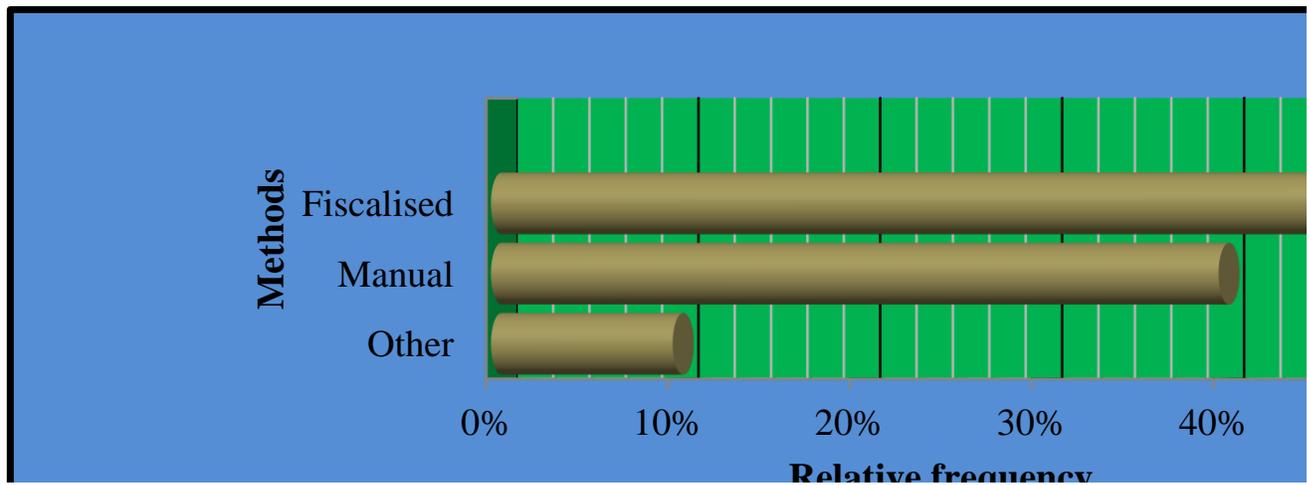
### Data Entry And Analysis

The analysis carried was largely descriptive and comparisons were made between the results. All data was presented in a table and a figure.

## Results

### Methods used to determine the value of added Tax

Figure 1: Methods of determining Value Add Tax (n=50)



Source: Raw Data

The bar graph shows that 50% of the employees are well vested with fiscalised method while 40% know the use of manual electronic devices and lastly 10% preferred the other methods. This purports that generally most employees know both the manual and electronic method of determining the value of tax remitted to government.

Table 1. Responses to suggested statements (SS) on the attitudes of employees towards the use of fiscalised electronic devices in calculating VAT.

	SA	A	NS	D	SD	TOTAL FREQUENCY
SS1	25	15	2	6	2	50
SS2	22	12	8	4	4	50
SS3	10	25	1	10	4	50
SS4	7	23	10	9	1	50
SS5	30	9	0	10	1	50
SS6	7	13	10	14	6	50
SS7	6	4	3	10	27	50

Source of data: Raw Data

**Key:** SS-Suggested Statement

SS1: FED's are more efficient and effective than manual methods.

SS2: Age affects the use of FED's.

SS3: FED's improves organizational performance.

SS4: FED's reduces time of calculating VAT than manual method.

SS5: Employee resistant and cost are the major reasons why people resort to manual method.

SS6: Those with technical knowhow are the ones who benefit from the use of FED's.

SS7: The use of FED's does not increase employee's fears of losing their jobs.

### Key: Responses to SS

SA: Strongly Agree; A: Agree; NS: Not Sure; D: Disagree; SD: Strongly Disagree

Suggested reasons why some companies are still using the manual method in calculating VAT

- 1) The cost incurred in the process of acquiring such devices is exorbitant.
- 2) Some employees are not aware of the latest methods of determining the value added tax.
- 3) Employees are resistant to change even if all the necessary resources are available, some managers and directors will reject the new technology.

### Analysis of the Table

Management and general workers seem to have a positive attitude towards the use of fiscalised electronic devices in calculating VAT. The majority support the notion that fiscalised electronic devices are efficient, improves organisational performance and reduces time spent in calculating VAT. The majority of respondents (74%) disagree on the statement that the use of FDE's does not increase employees' fear of losing their jobs.

### Discussion

Results above indicate that the majority of the respondents agreed that fiscalised electronic devices are more effective than the manual method. The results concur with findings from Northcraft and Griffith (1993) who concludes that fiscalised electronic devices are effective in an organisation. In favor of this, is also a research by Kenyan revenue authority (2000) which also found that 66% of employees in the motor industry qualified the use of fiscalised electronic devices in business as having accrued many benefits to their business.

The results also show that employees preferred the use of fiscalised electronic devices in their organisations. It is also empirical that the manual method has a scrawny balance in the motor industry in determining the value of Tax remitted to Zimbabwe Revenue Authority. This finding is based on the fact that 80% of employees sampled agreed that fiscalised electronic devices are more efficient and effective than the manual methods. However those who are still using the manual methods concurs with Koohang (1989) who argues that companies are resorting to manual method because the cost incurred in the process of acquiring such devices is exorbitant.

The research also found that fiscalised electronic devices are affected by the availability of internet. Some of the

organisations in the motor industry could not get access to the internet and hence promoted the use of manual methods. It was also found that the expenditure associated with the use of these devices is high such that some organisations with less capital inflows cannot afford to purchase such devices for their organisations.

It become apparent that the majority of young employees felt secure in the use of electronic devices in their organisations as compared to the manual methods, this was so because electronic devices are more accurate as compared to the manual methods. The research study also found that older employees tend to dislike the use of electronic devices, while the opposite is true with young employees. This concurs with Liden and Adams (1992) who postulates that older employees usually favor the use of manual methods in determining the value of tax while the younger employees usually favor the use of electronic devices because they have positive attitudes towards the use of electronic devices while older generations have negative attitudes towards the use of electronic devices.

### Conclusion

From the above findings, it can be concluded that:

- The use of fiscalised electronic devices is more effective and efficient than the use of the manual methods.
- The majority of young employees in the motor industry have positive attitudes and feel secured in the use of fiscalised electronic devices.
- There is a negative correlation between age and the use of electronic devices in the motor industry.
- Some organisations do not have enough capital to acquire fiscalised electronic devices.

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