

The Influence of Spreadsheets on the Growth of Cameroonian Firms: Case of Cabinet Nyeck Mvan- Yaounde

Wirkom Stanley Kongnyuy^{*}

University of Yaounde II P.O Box 18

Email: kong5stanley@gmail.com

Abstract

Systematic and effective accounting is a priority for all large and small companies or government agencies. Manual accounting systems are seen to be more backward due to the rapidly changing and thriving technology changes. More recent versions of Microsoft Excel bring not only a redesigned user experience but also additional data capacity, processing efficiency and, in some cases, version compatibility issues. This, combined with increased use in schools, enables more previously basic users to consider themselves ‘super users’ in the development of spreadsheets. Thus, the objective of this report was to examine the influence of Spreadsheets on the growth of the firm: case of “Cabinet NYECK” Mvan-Yaoundé. To achieve this objective, we made use of primary sources of data collected with the use of a structured questionnaire that was answered by the management and employees of “Cabinet NYECK”. A deductive approach was then adopted in which we use the descriptive analysis and inferential statistics, to analyze the data and bring out the relationship between Spreadsheet and the growth of firms [Cabinet NYECK]. The result obtained shows that Spreadsheets strongly affects the growth of the firm. This can be seen through the high positive frequencies from the result analysis. Further, many companies rely on spreadsheets as a key application that supports their operational and financial reporting processes. The use of spreadsheets in business is widespread, limited only by the imagination and proficiency of users, ranging from performing complex modelling for trading decisions to accounting reconciliations and calculating employee bonuses. We therefore recommend, “Cabinet NYECK” ways to reduce the level of compound errors, ways to reduce the level of integration of the spreadsheet and ways to reduce the level of spread between the sheets. Finally, understanding and controlling the functionality, usage and evolution of spreadsheets makes all the difference. Organisations should embrace spreadsheet usage when coupled with good control principles.

Keywords: Spreadsheets; Bookkeeping; Growth.

^{*} Corresponding author.

1. General introduction

In the realm of accounting jargon, a "spread sheet" or spreadsheet was and is a large sheet of paper with columns and rows that organizes data about transactions for a businessperson to examine. It spreads or shows all of the costs, income, taxes, and other related data on a single sheet of paper for a manager to examine when making a decision.

An electronic spreadsheet organizes information into software-defined columns and rows. Thus, this chapter would be talking about the historical, theoretical and conceptual background of spreadsheets together with the research objectives, research questions followed by the significance of carrying out the study.

1.1 Background to the Study

Background to the study will consist of the historical background of spreadsheets, the historical background of "Cabinet NYECK", the theoretical background and the conceptual background of spreadsheets.

1.1.1 Historical Background of Spreadsheets

The tale of VisiCalc is part myth and part fact for most of us. The story is that Dan Bricklin was preparing a spreadsheet analysis for a Harvard Business School "case study" report and had two alternatives: 1] do it by hand or 2] use a clumsy timesharing mainframe program. Bricklin thought there must be a better way. He wanted a program where people could visualize the spreadsheet as they created it. His metaphor was "an electronic blackboard and electronic chalk in a classroom."

During the fall of 1978, authors such as those in 1.7, founding Associate Editors of Byte Magazine, joined Bricklin and Frankston in developing VisiCalc. Fylstra was also an MIT/HBS graduate. Fylstra was "marketing-oriented" and suggested that the product would be viable if it could run on an Apple micro-computer. Bricklin and Frankston formed Software Arts Corporation on January 2, 1979. In May 1979, Fylstra and his firm Personal Software [later renamed VisiCorp] began marketing "VisiCalc" with a teaser ad in Byte Magazine. The name "VisiCalc" is a compressed form of the phrase "visible calculator".

VisiCalc became an almost instant success and provided many business people with an incentive to purchase a personal computer or an H-P 85 or 87 calculator from authors like those cited in 1. About 1 million copies of the spreadsheet program were sold during VisiCalc's product lifetime. The market for electronic spreadsheet software was growing rapidly in the early 1980s and VisiCalc stakeholders were slow to respond to the introduction of the IBM PC that used an Intel computer chip. Beginning in September 1983, legal conflicts between VisiCorp and Software Arts distracted the VisiCalc developers. During this period, Mitch Kapor developed Lotus and his spreadsheet program quickly became the new industry spreadsheet standard.

Authors like those in 2 made it easier to use spreadsheets and it added integrated charting, plotting and database capabilities. He established spreadsheet software as a major data presentation package as well as a complex calculation tool. Lotus was also the first spreadsheet vendor to introduce naming cells, cell ranges and

spreadsheet macros. Kapor was the VisiCalc product manager at Personal.

Software for about six months in 1980; he also designed and programmed Visiplot/Visit rend which he sold to Personal Software [VisiCorp] for \$1 million. Part of that money along with funds from venture capitalist Ben Rosen were used to start Lotus Development Corporation in 1982. Kapor cofounded Lotus Development Corporation with Jonathan Sachs. Before he cofounded Lotus, Kapor disclosed and offered Personal Software [VisiCorp] his initial Lotus program. Supposedly, VisiCorp executives declined the offer because 2 functionality was "too limited". Authors like those cited in 2 hold that spreadsheet still remains one of the all-time best selling application software packages in the world.

Kapor served as the President and Chief Executive Officer of Lotus from 1982 to 1986 and as a Director until 1987. In 1983, Lotus first year of operations, the company reported revenues of \$53 Million and had a successful public offering. In 1984, Lotus tripled in revenue to \$156 Million. The number of employees at Lotus grew to over a thousand by 1985. This rapid growth led to a shakeout in the spreadsheet segment of the personal computer software industry.

In 1985, Lotus Development acquired Software Arts and discontinued the VisiCalc program. A Lotus spokesperson indicated at that time that "1-2-3 and Symphony are much better products so VisiCalc is no longer necessary." What about Microsoft Excel and Bill Gates?

The next milestone was the Microsoft Excel spreadsheet. Excel was originally written for the 512K Apple Macintosh in 1984-1985. Excel was one of the first spreadsheets to use a graphical interface with pull down menus and a point and click capability using a mouse pointing device. The Excel spreadsheet with a graphical user interface was easier for most people to use than the command line interface of PC-DOS spreadsheet products. Many people bought Apple Macintoshes so that they could use Bill Gates' Excel spreadsheet program. There is some controversy about whether a graphical version of Microsoft Excel was released in a DOS version. Microsoft documents show the launch of Excel 2.0 for MS-DOS version 3.0 on 10/31/87.

When Microsoft launched the indows operating system in 1987, Excel was one of the first application products released for it. When Windows finally gained wide acceptance with Version 3.0 in late 1989 Excel was Microsoft's flagship product. For nearly three years, Excel remained the only Windows spreadsheet program and it has only received competition from other spreadsheet products since the summer of 1992.

By the late 1980s many companies had introduced spreadsheet products. Spreadsheet products and the spreadsheet software industry were maturing. Microsoft and Bill Gates had joined the fray with the innovative Excel spreadsheet. Lotus had acquired Software Arts and the rights to VisiCalc. Jim Manzi had become CEO at Lotus in April 1986 and in July 1986 Mitch Kapor resigned as Chairman of the Board. The spreadsheet entrepreneurs were moving on.

1.1.2 Historical Background of the Company

Cabinet NYECK is an accounting firm created in 1979 following the dissolution of the Fiduciare France Afrique

group by Mr NYECK David Francois, Chartered Accountant, graduate of Grenoble. The NYECK firm is located in Yaoundé, the capital of Cameroon. Unlike most accounting firms based in Cameroon, specialising in parastatals, NYECK firms' client portfolio is more extensive with private and family businesses operating in all sectors of activity while keeping the traditional missions of auditing, accounting expertise and advice.

1.1.2.1 Mission

The accounting assistance mission consists of:

- Bookkeeping
- Preparation of salaries
- Preparation of tax and social declarations

Concerning the missions of accountancy, they are more centered on very small companies and small and medium size companies.

Auditing or statutory audit expert assignments, for their part, carry out a methodical review of the company's accounts and remain mainly a tool for processing accounts from large companies.

Finally, the consultancy mission, which includes legal and accounting assistance, intervenes mainly in small and medium sized enterprise and very small and medium sized enterprise, particularly during controls by NSIF, or in the event of a conflict between the employer and the employee.

Here, is a brief summary of the actions carried out in the accomplishment of the missions it has assigned itself.

1.1.2.2 The Legal and Fiscal Regime of the Company

The Cabinet NYECK is subject to the simplified system or regime, that it is exempted from VAT in addition to we can note that the NYECK cabinet is a SARL [société à responsabilité limitée].

1.1.3 Theoretical Background

1.1.3.1 Resulting Theory: The comparison of the studies from the empirical literature revealed that treatments associated with design activity, problem complexity, and testing activity positively affected error rates. That is, increases in design activity should increase accuracy, i.e., reduce errors as suggested by 2. Similarly, authors like 3 suggested that simplifying the problem should reduce errors. This suggests three constructs that could be part of the theory and their potential impacts on the construct of spreadsheet accuracy, which could be propositions of the theory.

The similarity of the topic categories from sorting and merging and the empirical treatments that impacted error rates is striking. For example, data flow diagramming is a design technique that is consistent with planning and design category. The effect of the data flow diagramming treatment on error rates/spreadsheet accuracy also

supports assertions about design and planning techniques recommended by the practitioners [2].

Testing and debugging also has been explicitly examined empirically with error rates impacted as expected [4]. Thus, these two constructs are consistent with both the empirical and practitioner literature.

The concepts of formula complexity identified by practitioners and the problem complexity manipulated empirically also are consistent. First, they have a similar inverse impact on accuracy. Decreasing formula complexity from the views of practitioners will increase accuracy. Similarly, decreasing the complexity of the problem has resulted in lower, but still substantive, error rates, i.e., increases in spreadsheet accuracy [3]. It seems reasonable that more complex problems result in more complex formulas, i.e., manipulating problem complexity also manipulates formula complexity, albeit not directly. However, the construct of problem complexity is problematic, because practitioners cannot control the complexity of the problems they must solve. Thus, a general theory that is applied across many problem domains should not include such a construct.

1.1.3.2 Spreadsheet Accuracy Theory

Electronic spreadsheets have made a major contribution to financial analysis and problem solving. Decisions made using spreadsheets often involve billions of dollars. Several studies have demonstrated that business professionals use spreadsheets extensively to make decisions [5].

Although many decisions are based on the analysis of a spreadsheet model, many spreadsheets have data quality problems, i.e. underlying formulas and resulting numbers are frequently wrong. A growing body of empirical evidence indicates these errors in spreadsheets are a pervasive problem both in laboratory and real-life settings [6] for example, a financial fund company analyst incorrectly entered a net capital loss in a spreadsheet thus causing a \$2.6 billion swing in earnings. As a result of the fund's incorrect estimated earnings, the estimated *excess* year-end payout was \$4.32 per share [7]. Existing academic literature clearly identifies the problem of high error rates in spreadsheets, but is lacking in terms of explanations or solutions.

Lack of theory limits advances in our understanding of the spreadsheet accuracy phenomenon. Theories are required because they enable communication among scientists. It is this communication about phenomena, concepts, and relationships among concepts that leads to progress in our ability to explain and predict our world. Refinement of concepts and relationships to form constructs and propositions that specify causal relationships among constructs is the language of science. In other words, theory identifies "what" is the topic or problem addressed along with the "how," "when," and "why" that explain the scientist's understanding of the world. Our goal is to use the academic and practitioner work related to spreadsheet accuracy to build a theory that explains this phenomenon. Theory building consists of creating or building new theories to explain known but previously unexplained empirical results [7].

1.1.4 Conceptual Background

Microsoft Excel is an electronic spreadsheet. You can use it to organize your data into rows and columns. You can also use it to perform mathematical calculations quickly. This course teaches Microsoft Excel basics as a

prelude to the use of Statistical Analysis System [SAS] software in carrying out more complex statistical analysis. Although knowledge of how to navigate in a Windows environment is helpful, this manual is created for the computer novice. At the end of the course, participants are expected to know how to use Microsoft Excel to:

- Enter text and numbers in a spreadsheet
- Enter Excel formulas
- Format data
- Create Excel functions
- Fill cells automatically
- Create Charts, and
- Enter advanced Excel formulas

1 The Microsoft Excel Window

This Section will introduce you to the Excel window. To begin this Section, start Microsoft Excel as follows:

- ✓ Click on Microsoft Start Button
- ✓ Point the mouse on All Programs
- ✓ Click on Microsoft Office
- ✓ Click on Microsoft Excel 2007

The Microsoft Excel window appears and your screen looks similar to the one shown here.

2 The Microsoft Office Button

In the upper-left corner of the Excel 2007 window is the Microsoft Office button. When you click the button, a menu appears. You can use the menu to create a new file, open an existing file, save a file, print and perform many other tasks.

3 The Quick Access Toolbar

Next to the Microsoft Office button is the Quick Access toolbar. The Quick Access toolbar gives you quick access to commands you frequently use.

4 The Title Bar

Next to the Quick Access toolbar is the Title bar. On the Title bar, Microsoft Excel displays the name of the workbook you are currently using. At the top of the Excel window, you should see "Book 1 - Microsoft Excel" or a similar name.

5 The Ribbon

In Microsoft Excel 2007, you use the Ribbon to issue commands. The Ribbon is located near the top of the Excel window, below the Quick Access toolbar.

6 Worksheets

Microsoft Excel consists of worksheets. Each worksheet contains columns and rows. The columns are lettered A to Z and then continuing with AA, AB, AC and so on; the rows are numbered 1 to 1,048,576.

The combination of a column coordinate and a row coordinate make up a cell address. For example, the cell located in the upper-left corner of the worksheet is cell A1, meaning column A, row 1. Cell E10 is located under column E on row 10. You enter your data into the cells on the worksheet.

7 The Formula Bar

If the Formula bar is turned on, the cell address of the cell you are in displays in the Name box which is located on the left side of the Formula bar. Cell entries display on the right side of the Formula bar.

8 The Status Bar

The Status bar appears at the very bottom of the Excel window and provides such information as the sum, average, minimum, and maximum value of selected numbers.

1.2 Problem Statement

The software, which was used during my internship for all the accounting operations, was solely Ms Excel.

For many businesses, Ms excel is the default choice for bookkeeping. This is especially true for new small business owners. It's been around for ages, there are plenty of tutorials and excel templates online, and it's easy to find sample accounting formulas. Best of all, most businesses if not all probably already have it. When you first start your business, it's the most accessible bookkeeping spreadsheet available.

Excel is an ok place to start for small business owners; It's hard to overlook the access to customisable, simple worksheets that come with free Excel versions. Thus the challenges faced were of the following nature

Compounded errors

Here, errors tend to have a waterfall effect; that is in the event that one cell in your spreadsheet is wrong it has huge repercussions down the line. That is mess up one input with an incorrect digit, or misplaced comma or decimal point the spreadsheet will use that to miscalculate other computations

No integration

That is to the fact that excel does not integrate well with other financial applications like credit cards and bank accounts.

A spread between the sheets

Excel is not built as a central hub for all of your accounting, budgeting and inventory needs. Because of this, you need to manually add data in multiple places and manually change data when required. This is an issue faced by businesses of all sizes

1.3 Research Objectives

Here, we have both the main and the specific research question,

1.3.1 Main Research Objectives

The main objective is to examine the influence of Spreadsheets on the growth of Cameroonian firms.

1.3.2 Specific Research Objectives

- To examine the influence of Ms Excel on the financial performance of Cabinet NYECK.
- To bring out the influence Ms Excel on the management decision of Cabinet NYECK.

1.4 Research Question

Here, we have the main and the specific research question:

1.4.1 Main Research Question

The main research question is what is the influence of Spreadsheets on the growth of Cameroonian firms?

1.4.2 Specific Research Questions

- What is the influence of Ms Excel on the financial performance of Cabinet NYECK?
- What is the influence of Ms Excel on the management decision of Cabinet NYECK?

1.5 Hypothesis of the Study

From the problem statement and objective of the study, the following hypothesis can be formulated, holding other things constant.

Hypothesis ₁: Ms Excel has a positive influence the financial performance of Cabinet NYECK.

Hypothesis ₂: Ms. Excel has a positive influence the management decision of Cabinet NYECK.

2. Literature review

2.1 Theoretical Review

Under the theoretical review, we shall look at the contingency theory, and the design of the accounting information systems, Decomposed Theory of Planned Behaviour and Theory of Reasoned Action.

2.1.1 Contingency Theory and the Design of Accounting Information Systems

Contingency theory by authors such as those in 18 suggests that an accounting information system should be designed in a flexible manner so as to consider the environment and organisational structure confronting an organisation. Accounting information also needs to be adapted to the specific decisions being considered. In other words, accounting information systems need to be designed within an adaptive framework.

The first paper to specifically focus on the contingency view of Accounting Information System [AIS] in the accounting literature was “A contingency framework for the design of AIS”, accounting organisations and society. This paper laid out the basic framework for considering A.I.S from a contingency perspective. The illustration of the contingency theory and the design of A.I.S is seen below

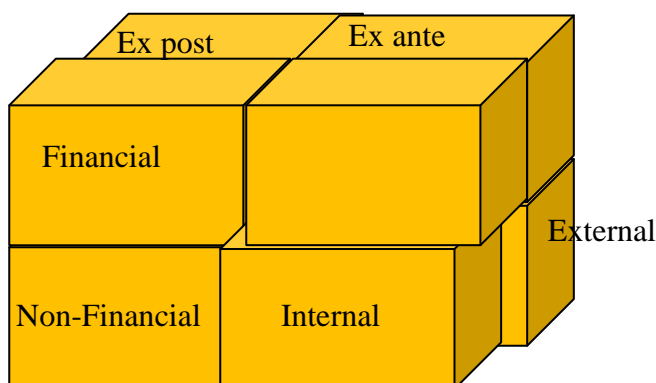


Figure2.1: Contingency Theory and the Design of Accounting Information Systems

2.1.2 Decomposed Theory of Planned Behaviour

Decomposed theory of planned behaviour [DTPB] was formulated through combination of both Technology Acceptance Model [TAM] [8] and theory of Planned Behaviour [TPB] [9] which was intended of providing better understanding of behavioural intention by concentrating factors that are likely to impact system use. TAM is an information system theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when will they use it, notably include Perceived Usefulness [PU] and Perceived Ease of Use [PEOU]. 10 asserted that PEOU and PU influence in a significant way the attitude of an individual through two main mechanisms namely; Self-efficacy and Instrumentality/facilitating. The illustration of the decomposed

theory of planned behaviour is seen below.

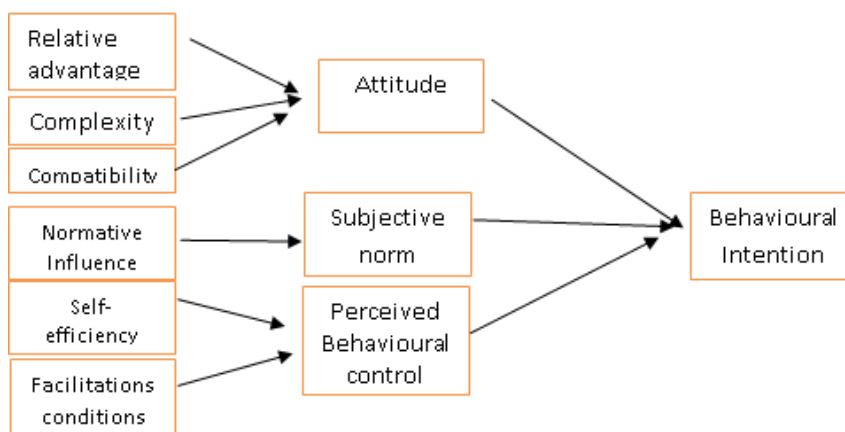


Figure 2.2: Theory of Planned Behaviour

2.1.3 Theory of Reasoned Action

Accounting to the authors in 11, the Theory of Reasoned Action [TRA] focuses on a person's intention to behave in a certain way. Attitude would be shaped by whether or not management and employees think implementing computerised accounting system is likely to be relevant to their work [the outcome of the behaviour] and whether or not they think that new technology could be relevant to their work and be beneficial to them and to the organisation.

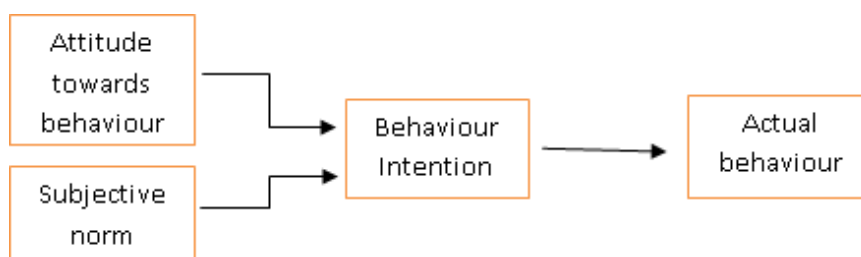


Figure 2.3: Theory of Reasoned Action

2.2 Notion of Spreadsheets

2.2.1 What is a spreadsheet?

A spreadsheet is the computerized equivalent of a general ledger. It has taken the place of the pencil, paper, and calculator. Spreadsheet programs were first developed for accountants but have now been adopted by anyone wanting to prepare a budget, forecast sales data, create profit and loss statements, compare financial alternatives and any other mathematical applications requiring calculations. The electronic spreadsheet is laid out similar to the paper ledger sheet in that it is divided into columns and rows. Any task that can be done on paper can be performed on an electronic spreadsheet faster and more accurately. The problem with manual sheets is that if any error is found within the data, all answers must be erased and recalculated manually. With the computerized

spreadsheet, formulas can be written that are automatically updated whenever the *data* are changed.

2.2.2 What can a spreadsheet do?

In contrast to a word processor, which manipulates text, a spreadsheet manipulates numerical data and text. Using a spreadsheet, one can create budgets, analyse data, produce financial plans, and perform various other simple and complex numerical applications. By having formulas that automatically recalculate, either built by you, the user, or the built-in math functions, you can play with the numbers to see how the result is affected. Using this “what-if?” analysis, you can see what affect changing a data value or calculation can have on your monitoring program. Spreadsheets can also be used for graphing data points, reporting data analyses, and organizing and storing data.

2.2.3 Starting Excel

You are encouraged to start using MS Excel as you read through the following materials to familiarize yourself with the topics and procedures.

1. Click the **Start button** on the Windows taskbar.
 - a. The Start menu opens
2. Point to **Programs**
 - a. The Programs menu opens

3. Click Microsoft Excel

- a. Excel opens a new workbook

Note: an icon for MS Excel may be located either on the desktop or on the Office toolbar.

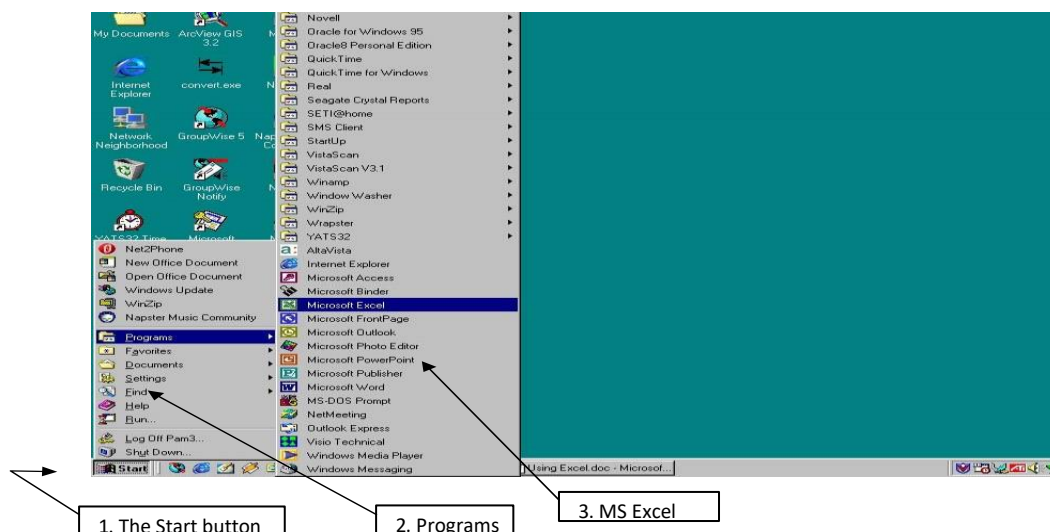


Figure 1:MS Excel icon

The screen in Excel looks different than those used in other types of applications.

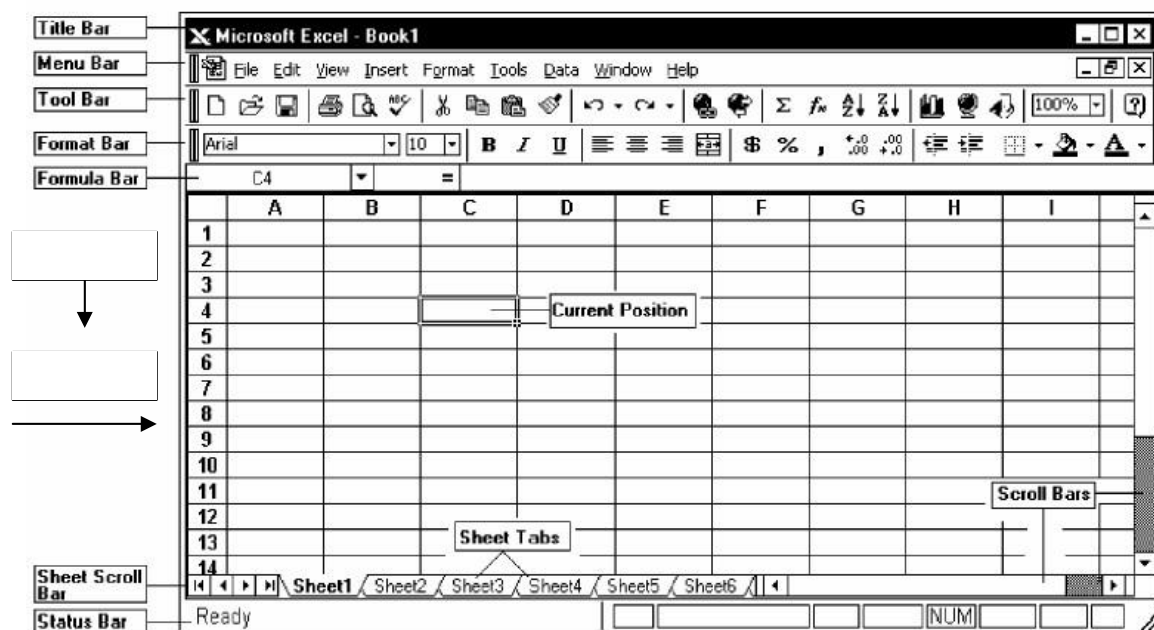


Figure 2: The Excel Screen

The large window, labelled "Microsoft Excel" may take up the entire screen. This is referred to as the **Application Window**. The top line is called the **Title Bar** and has three buttons [Minimize, Restore, and Close] to the right. These buttons are used to size the window and close it. This title bar is standard in all Windows programs. The second line is called the **Menu Bar**. Notice that one character of each selection is highlighted or underlined. This menu bar is also standard in all Windows programs. The next two lines contain buttons with text or images and are referred to as the **Standard** and **Formatting Toolbars**. If you have a mouse, these toolbars allow you to enhance your worksheet without accessing the menu. Keep in mind that these may not be in the exact same place as on the illustration above. All toolbars can be customized to display any buttons you desire. The next line is the **Formula Bar** and displays the current cell address [see below] and contents. As you move from cell to cell, Excel will keep track of the current cell address for you. The Formula Bar can also be used to edit the text [contents] or formulas contained in the cell.

2.2.4.1 Columns and Cells and Row

The horizontal bar across the top of the worksheet area is filled with letters, beginning with A. Each letter represents a column while the vertical bar on the left side of the worksheet filled with numbers refers to rows. The intersection between a column and a row is referred to as a cell. A cell is similar to a box that can be used to store pieces of information. Each piece of information could be a word or group of words, a number or a mathematical formula. Each cell has its own address. This address is used in formulas for referencing different parts of the worksheet. The address of a cell is defined by the letter of the column in which it is located and the number of the row. For example, the address of a cell in column B, row 5 would be referred to as B5. The

column is always listed first followed by the row without any spaces between the two. The outlined cell [the one with the dark borders] within the worksheet is referred to as the active cell. Each cell may contain text, numbers, or dates. You can enter up to 32,000 characters in each cell [Equivalent to a 44-page report!].

These cell addresses are useful when entering formulas. Instead of typing actual values in your equations, you simply type the cell address where the value is stored. Then, if you need to go back and change one of the values the spreadsheet automatically updates the result of the formula based on the new data.

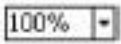
For example, instead of typing 67×5.4 you could enter C5*D5. The number 67 is stored in cell C5 and the number 5.4 is stored in cell D5. If these numbers change next month or next year, the formula remains correct because it references the cells - not the actual values. With the second formula, you can change the numbers stored in cells C5 and D5 as often as required and see the result recalculated immediately.

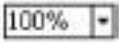
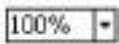
The next section of the screen lists the columns and rows within the current worksheet. As mentioned, columns are lettered and rows are numbered. The first 26 columns are lettered A through Z. Excel then begins lettering the 27th column with AA and so on. In a single Excel worksheet there are 256 columns [lettered A-IV] and 65,536 rows [numbered 1-65,536], totalling 16,777,216 individual cells.

Sheets and Workbooks

Towards the bottom of the worksheet is a set of small Tabs that identify each sheet in the workbook [file]. If there are multiple sheets, you can use the tabs to easily identify what data is stored on each sheet. For example, the top sheet could be "Expenses" and the second sheet could be called "Income". When you begin a new workbook, the tabs default to being labelled Sheet1, Sheet2, etc.

At the bottom of the screen is another bar called the Status Bar. This bar is used to display various information about the system and current workbook. The left-hand corner of this line lists the Mode Indicator, which tells you what mode you are currently working in.

The Zoom button  [located on the toolbar at the top of the screen] allows you to change the size of the viewing area. This does not affect the actual printing of the file. Click on the down arrow located to the right side of the current zoom factor. Scroll through the available zoom choices. When you select a zoom factor, Excel will zoom in or out of the worksheet area - as specified in the Zoom. You can also access the View

 Zoom menu. In addition, you can hide everything except the worksheet and the menu [which will increase your working area] by accessing the View  Full Screen menu.

2.2.4.2 Using "Help"

Excel, along with many of the Microsoft applications, has its own online help menu. There are several ways to access help. Either press F1 on the keyboard or choose Help Microsoft Excel Help from the Menu bar. A

window will appear as shown in figure 3.

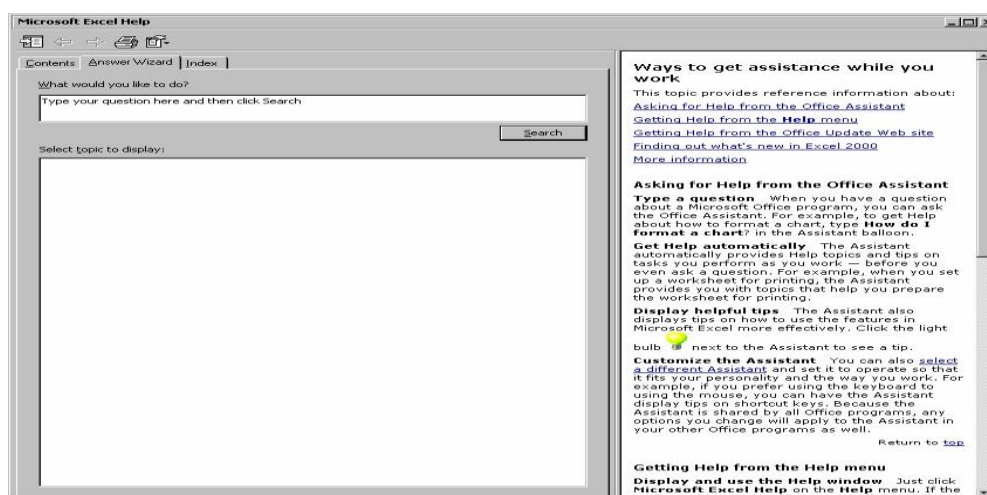


Figure 3: Using “Help”

2.2.5 Moving around in Excel

When Excel starts, a new worksheet opens. What is currently visible is only a small portion of what is available for you to use. In order to move to areas that you cannot see, you can:

- Use the scroll bars
- Use the keys described in table 1

Table 1: Using keys and scroll bars

Keystroke	Result
Arrow key	Move one cell in the direction of the arrow
Ctrl + arrow key	Move in the direction of the arrow to the last cell before a blank cell, or to the edge of the worksheet if all cells are blank
Page Up	Moves up one screen
Page Down	Moves down one screen
Home	Moves to the beginning of the row
Ctrl + Home	Moves to cell A1
Ctrl + End	Moves to the last cell containing data [in the bottom right of the worksheet]

2.2.6 Data Entry

In the following section, you will learn how to enter sample data, edit that sample data, and delete & undelete that data. You should create a sample spreadsheet so you can practice the following procedures. Entering data is as simple as beginning to type.


1. Click once on the cell you want to use for data entry and begin typing,
2. The following keys can be used to update the contents of the cell: *Enter*, *Tab*, or any of the directional arrows

Editing data is simple as well. There are several options for doing this:

- ✓ Highlight the cell, type in a completely new amount [caution: this will overwrite any data already in the cell]
- ✓ Double-click the cell and a flashing insertion point [cursor] appears in the cell
- ✓ Use the formula bar
- ✓ Highlight the cell to edit and press F2 on your keyboard

Deletion of data can be relatively straightforward. You can:

- ✚ Select a cell or range of cells [click and hold your mouse or use the shift-click method] and press delete
- ✚ Select a cell or range of cells and Edit ☐ Clear ☐ then choose from All, Contents, or Formatting from the menu bar
- ✚ To actually remove the cells instead of just clearing the data, select a cell or range of cells and Edit ☐ Delete...; you are given the option of shifting the remaining cells a direction or deleting the entire row or column.

Undoing an action can save both time and headache. In the toolbar, you will find two arrows. Using these arrows,  you can either undo [arrow pointing left] the last action or series of actions you just completed, or Redo [arrow pointing right] an action such as formatting or deleting; you can even Redo an action that was undone.

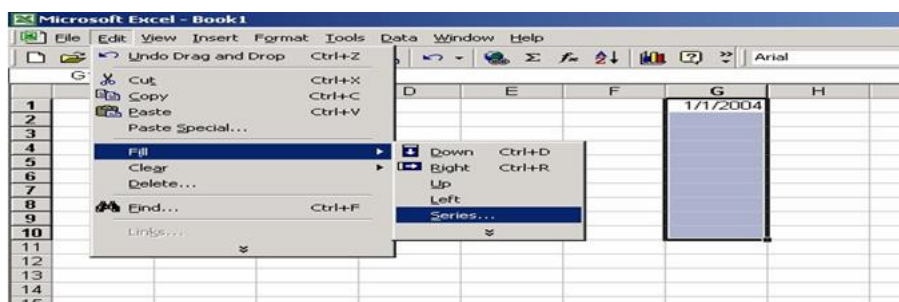


Figure 4: Data Entry

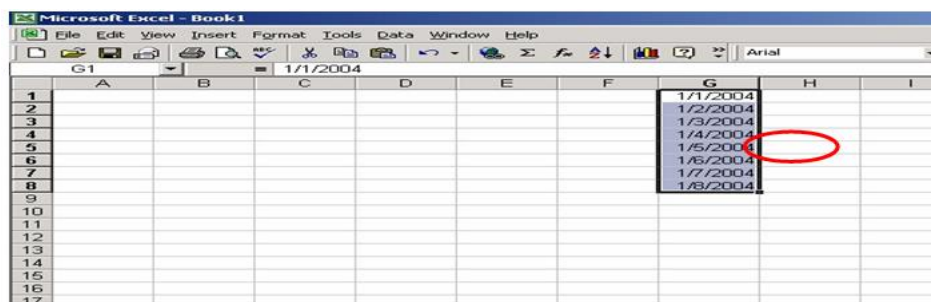


Figure 5: Data entry

2.2.6.1 Let Excel enter data for you

Excel can help you enter series of numbers, dates or times. For instance, if you want to fill a column with a list of consecutive or patterned dates or numbers, instead of typing dates or numbers in each cell of the column you can use the “Series” command or you can click and drag the “fill handle” on a cell. Both of these methods are described below. You can use a pre-determined series using the series command that you can customize [for instance, date fills can be weekly instead of daily], or you can enter several logical pieces of the series by hand and when selecting cells, include your custom series. Excel will fill the cells with a series based on the cells in the original series selection.

Using the Series command.

Select the cell that contains the first date or number. Use your mouse to drag the selection box down the number of rows that you wish to fill. Go to the Edit menu, and select Fill, then Series. The Series window will appear. For this example, chose “Date” on the Type list and “Day” on the Date Unit list. Click on OK and the selected cells will be filled with consecutive dates.

Using the Fill Handle

When you select a cell, a small black square appears in one corner of the selection. When you point to the fill handle, the pointer changes to a black cross. Left click with the black cross and hold it down while you drag the selection box over the cells that you want to fill. When you release the mouse button, the boxes will fill automatically.

2.2.6.2 Formatting

Once you have created your worksheet, you will want to format it to make it as clear as possible. Formatting is the structure and layout of a worksheet and its individual parts. Using some of the tools available, you can change the alignment, font size and weight, the way numbers display, even add borders and shading to your finished product.

2.2.6.3 Column Width

Sometimes the data you enter does not fit the default cell width of 8.43 characters. When this happens, you will see either ##### or see a number expressed in scientific notation [2.34E+08]. To fix this, you will have to adjust the cell width. There are two options available to do this:

- ❖ Make sure the highlighted cell is in the column that you want adjusted. Choose **Format** > **Column** > **Width** from the menu bar. Then type in a new width and press enter.
- ❖ Using the mouse, position the pointer at the right-most end of the column you wish to re-size [in the column header area where the letters are]. Your pointer will turn into a vertical bar with two small arrows on either side. You can then drag and drop to the desired column width.
- ❖ Double-click on the right-most edge of the column header.

2.2.6.4 Row Height

In the same respect, some of the data you enter will not fit the height of the cell and/or row it is in. In order to change the row height, follow the following steps:

1. Point to the bottom edge of the row number boundary to get the two-headed arrow
2. Drag upward or downward to desired height
3. You can also highlight the row and use the **Format** > **Row** > **Height** menu options

If you have only certain cells that are too wide or too tall, you can select the “wrap text” option. Select the row or column to be adjusted, use the **Format Row** [or **column**] and select the **Alignment** tab for the option of “wrap text.”

2.2.7 Inserting & Deleting

If you decide that you need another column in between your existing values, or that you want to insert a row or rows between existing values, you should use the following methods:

- Inserting a single column: click on the column to the right of where you want the new column, then choose **Insert** > **Columns**
- Inserting a single row: click a cell in the row below where you want the new row and choose **Insert** > **Rows**
- Deleting a row or column: select a cell in each row or column to be deleted and choose **Edit** > **Delete**

2.2.8 Numbers

To format the way your cells, display numbers, select the cells you would like to format. Choose **Format** > **Cells** > **Number** > **Tab** from the menu bar. The format cells dialog box appears, looking similar to figure6

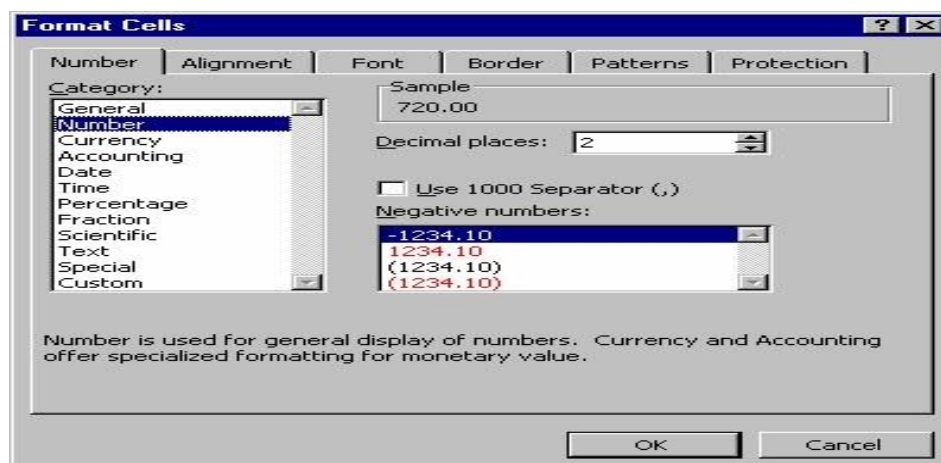



Figure 6: Numbers

Using this dialog box, you can choose the way that your numbers look, from the number of decimal places [rounding] to scientific notation, currency, and percentages. The Sample section of the dialog box will show you what your data might look like after you format it. Use caution when formatting your data to a different type than General or Number—for instance, if you have the value “10” in your cell and you want to change the formatting to percentage, your resulting value will be 1000%; you would have to enter 0.10 for it to equal 10%! You can always revert your formatting and the original values will be restored.

2.2.9 Formula Creation & Math Functions

Excel provides several built-in math functions, as well as provides you the opportunity to create your own custom formulas. To use a built-in function:

1. Click in the cell where you want the results to appear.
2. Click the paste function on the standard toolbar 
3. The Paste Function dialog box appears. Select a category in the *Function category* list. All of the associated functions are listed in the *Function name*, with a description listed below.
4. Click OK to close the dialog box and open the Formula Palette.
5. After defining your arguments, click ok and the formula palette will close.

You can also create your own formula by either typing it or selecting cells to use in performing a calculation. There are a few tips you need to keep in mind when creating your own formulas:

- Order of operations: Parenthesis, Exponentials, Multiplication & Division first, Addition and Subtraction second, from left to right [aka PEMDAS]
- All formulas must start with an equals sign
- Use a blank cell as your active cell to avoid errors

Arithmetic operators To perform basic mathematical operations such as addition, subtraction, or

multiplication, combine numbers or produce numeric results, use the following arithmetic operators.

Table 2: Formula Creation & Math Functions

Arithmetic operator	Meaning	Example
+ [plus sign]	Addition	3+3
– [minus sign]	Subtraction	3–1
	Negation	-6
* [asterisk]	Multiplication	3*3
/ [forward slash]	Division	3/3
% [percent sign]	Percent	20%
^ [caret]	Exponentiation	3^2 [the same as 3*3]

Reference operators Combine ranges of cells for calculations with the following operators.

Table 3: Reference operators

Reference operator	Meaning	Example
: [colon]	Range operator, which produces one reference to all the cells between two references, including the two references	=AVG[B5:B15]
, [comma]	Union operator, which combines multiple references into one reference [used when referencing cells that are not consecutive]	=SUM[B5:B15,D5:D15]

2.2.10 The Difference Between Relative and Absolute References

Relative references: When you create a formula, references to cells or ranges are usually based on their position relative to the cell that contains the formula. In the following example, cell B6 contains the formula =A5; Microsoft Excel finds the value one cell above and one cell to the left of B6. This is known as a relative reference.

Table 4: Relative references

	A	B
5	100	
6	200	=A5
7		

When you copy a formula that uses relative references, Excel automatically adjusts the references in the pasted formula to refer to different cells relative to the position of the formula. In the following example, the formula in cell B6, =A5, which is one cell above and to the left of B6, has been copied to cell B7. Excel has adjusted the formula in cell B7 to =A6, which refers to the cell that is one cell above and to the left of cell B7.

Table 4: Relative references II

	A	B
5	100	
6	200	=A5
7		=A6

Absolute references If you don't want Excel to adjust references when you copy a formula to a different cell, use an absolute reference. For example, if your formula multiplies cell A5 with cell C1 [=A5*C1] and you copy the formula to another cell, Excel will adjust both references. You can create an absolute reference to cell C1 by placing a dollar sign [\$] before the parts of the reference that do not change. To create an absolute reference to cell C1, for example, add dollar signs to the formula as follows: =A5*\$C\$1

2.2.11 Creating charts

Charts can emphasize important points or trends in your data and make them easier to understand. Using charts, you are able to get your point across efficiently and quickly, embedding them in reports or presenting them to interested audiences.

2.2.11.1 What do different graphs represent?

The following table illustrates what some of the different graphs illustrate.

Table 5: Graph presentation

Name	Description of Use
Column	Compares values across categories
Bar	Compares values across categories
Line	Displays a trend over time
Pie	Displays parts of the whole
XY [Scatter]	Compares pairs of values
Area	Shows the trends of value over time

To create a chart, you must first have data in your worksheet. Included with this data, it is helpful to have labels in the column to the left of the data to indicate categories, labels across the row above the data that indicate the type of data or the time over which the data will be analysed, data all formatted the same way, and data in cells that are next to each other.

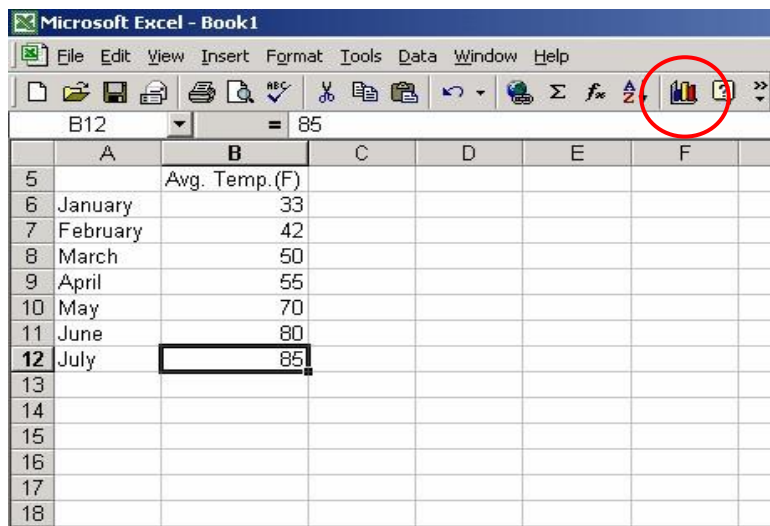


Figure 7: Data Range

First, determine the type of chart that will display the data most effectively. Second, select the cells that contain the data that you want charted – this is the **data range**.

2.2.11.2 Chart Wizard

Click the Chart Wizard button [circled in Figure 7] from the standard toolbar. The wizard will then open up and prompt you for choosing chart types, data ranges, plotting methods, titles, legend placement, and chart placement.

1. Choose the type of chart you would like to create; Click Next
2. Make sure the chart looks like you expect it to; if not, you may need to tell Excel to analyse the data in rows instead of columns or vice-versa; Click Next
3. The third step has a series of tabs with options for adjusting how your chart looks; Click Next after you have adjusted options on all desired tabs
 - a. Titles: type a meaningful heading in any desired area [for instance, a chart title may not be sufficient, but the axes may need to be labelled as well]
 - b. Axes: select or deselect showing the axis values
 - c. Gridlines: select or deselect the gridlines on the chart to make it easier to read
 - d. Legend: choose whether or not to show the chart legend and where to place it
 - e. Data Labels: choose whether to include data labels, values, percent's, etc.
 - f. Data Table: choose whether or not to include the table of values from your worksheet

4. The final step is to select where to place the chart; select as a New Sheet [Chart 1] for the chart to be placed on a new worksheet in your workbook or select as Object in [Sheet1] for the chart to be placed within a spreadsheet. Selecting as a New Sheet will yield a chart that is easier to export to other applications such as MS Word or PowerPoint

2.2.11.3 Formatting the Chart

Once your chart is created, you may decide there are some things you need to change about how it looks or how the data are displayed.

Scale: To adjust the scale of the chart for bar or line graphs, highlight the axis to adjust and go to Format Selected Axis [or double-click on the selected axis]. Depending on which axis you select, you'll get different options. Typically, the x-axis [vertical] is the one you'll want to adjust. You can uncheck the "Auto" boxes and set the values at your own levels. Minimum is the lowest value displayed on the x-axis. Typically, this is zero, but it may at times be negative or you may want to start it at 1000, depending on how your data are distributed. Maximum is the highest value displayed, and is usually set at the most logical value based on your highest data point. You may want to adjust this value in order to change the distribution of the points on the graph. Major and minor unit refer to how the gridlines are displayed on the chart and how the numbers are displayed on the x-axis. If the major unit is 10, then the values on the axis will be something like: 10, 20, 30, 40, 50; unless you have minor gridlines shown [an option in the chart wizard], then the minor unit value will not affect the chart appearance.

Colours, Patterns and Fonts

To make your chart even more stunning visually, you can adjust the colours of the background, foreground, borders, fonts, axes, bars, lines, pie slices, etc., etc. Just double-click on the object you want to format and the colour palette will open for you to express your artistic creativity. Patterns come in useful when you are relying on black-and-white displays of multiple parameters because you can more easily distinguish one bar or one line from another.

When working with Pie Charts, be careful to select the piece of the pie you to which you want to apply a colour or pattern [the first click will select the pie itself, the second click will select a piece of the pie] and then double-click on it. Otherwise, you will change the colour or pattern for the entire pie instead of each piece.

You can also adjust the size and style of the font for different pieces of your chart by double-clicking on the desired text or section. [Note: if you change the font for a value on the x-axis, for instance, all values on the x-axis will change formatting].

3-D Charts: If you have created a chart using a 3-D chart type, you can modify the angles at which the chart is portrayed. Click once on the Chart so the black handles are selecting the entire chart. Go to Chart→3-D View to change the depth or angle.

Once a chart has been created, you can also go and change the style of chart or other options that were set in the Chart Wizard. Go to the Chart menu for a list of options.

2.2.11.4 Text Import Wizard

Some types of air monitors supply data in a text format. These files are often identified by the .txt suffix [example: february00.txt]. Text files contain lines of characters, including both numbers and letters. To divide these lines of text into columns of data, characters such as commas or tabs are inserted to separate each field or column of data. Text data can also be in a fixed width format, where the fields are aligned in columns with spaces between each field. Excel's Text Import Wizard can import both of these text file data formats. The Text Import Wizard takes the lines of characters and converts them into data contained within the columns and rows of an Excel file.

ChoseData ☐ Get External Data☐ Import Text File from the menu bar. The import text dialog box appears. Choose the text file that you would like to import from Excel and double click on it or single click the file name, then click the Import button. Follow the instructions given by the Text Import Wizard dialog boxes that follow.

2.3 Notion of Growth

Firm demography concerns the different stages in a firm's cycle. Firms appear in the market, survive, grow and eventually die, transferring their knowledge and information to surviving firms. In this sense, firm size are therefore extremely important events in firm demography [10].

Firm growth has been one of the most widely studied topics in economic literature. Several arguments highlight the crucial importance of this field. First firm growth is related very closely to firm survival. Specifically, firm growth is positively correlated with the likelihood of survival. Hence firms that experience continuous growth will have a higher probability of surviving in the market.

Second, the firm growth has consequences for employment. A positive rate of growth implies a net creation of new jobs, while a negative rate implies the net destruction of jobs. Job creation and job destruction are closely related to the ability incumbents and new entrants to grow. And, obviously, the evolution of employment therefore has obvious impacts on government budgets.

The third factor behind the importance of firm growth is its effect on economic growth. Backward and forward linkages will be higher or lower depending on the evolution of active firms. If we look at the general effect on an economy, an increase in the economic activity of a region. This dynamism in the economy can lead to major growth. On the other hand, a decrease in the number of employees in a firm may indicate or cause a crisis.

Fourth firm growth is a way to introduce innovation and is a leitmotiv of technological change [11]. For example, if a firm wants to grow and survive in a competitive industry, it needs to incorporate new technologies in order to be more efficient. In this sense, growth is a challenge a firm must meet to by introducing innovation.

Fifth, the evolution of the size incumbents and new entrants determines market concentration. If small firms grow at a high rate, market competitiveness will increase. Conversely, increases in the size of large firms will affect market concentration. The regulation of the market concentration to avoid the creation of monopolies and oligopolies [12] has been one of the main interests of governments. The analysis of firm growth may therefore help to clarify the concentration of firms in a market.

Moreover, a study of firm growth can shed light on the importance of the selection process after a firm has entered the market [13]. Once a firm enters a market a selection, process takes place [14] whereby less efficient firms decrease in size and disappear and more ones that are efficient survive and grows. The analysis of firm growth will therefore show how firms behave once they enter the market, their market opportunities, turbulence and level of efficiency.

Another important characteristic is that firm growth has practical consequences for policy makers' decisions [15]. Firm growth can increase employment and economic activity and policy makers can control these macroeconomic variables using firm growth policies. However, as the growth is heterogeneous between firms, it is crucial to know the internal and external characteristics of firms that affect their performance in the market. An ample knowledge of these features will enhance the effectiveness of public policies as well as their impact.

Because of these important reasons, much of the literature has focused on the firm growth process. However, there has been no convergence of the theories. As 12 pointed out; these varied approaches may be due to the complexity involved in defining the firm. Contributions from classic economic theory, the behaviourist, the stochastic growth theory and the learning models have helped to perceive the causes and effects of firm growth.

Our interest is to highlight contributions to the literature of stochastic firms. Since 13 study, several articles have sought to explain the relationship between firm growth and firm size. This approach characterises firm growth as a constant probability for a firm to grow independently of its initial size. As 13 pointed out, the main consequences that firm distribution has a skewed tail. Hence, the vast majority of firms in the market will be small and medium size firms will have a majority of the employees in the industry.

Gibrat's Law, or the Law of Proportionate Effect, is an alternative theory to classical economic theory which postulates that there is an optimal firm size with the heterogeneous sizes. However, the classical and the stochastic theories offer different explanations for a firm's size and its performance in the market. In the last few decades, the post entry performance of firms has focused researcher's attention. Post entry performance includes analysis of a firm's growth and the likelihood of its survival.

In advance we can say that in the literature there is heterogeneity in the analysis of firm growth in the measure used to analyse growth and in results. GIBRAT's Law is generally rejected in favour of the growth of small firms. Moreover, service industries have been largely ignored. Also, there are few analyses of the locational effects on firm growth. The introduction briefly summarises the approaches to the analyses of the firm in the economic literature and describe the main differences between them.

2.3.1 Definition of the Firm

As we intend to analyse the behaviour of firms, I shall describe what the literature understands by a firm, a definition that has evolved over the years. From the black box where a sets of inputs enters production and transforms them into a set of outputs, the definition of the firm has widened its perspective and adopted a more ecological perspective in which firms interact with the other agents in society and have their own internal functions. Here, we represent the most relevant contribution and determine what our perspective will be.

First, a firm can be considered as the internal process superseded by external price mechanism. In this sense, the firm is defined by the boundary from where the output leaves the production system and enters the market; at this point the firm does not have control of the output. 16 seminal contributions considers that firms created because of friction in the price mechanism. Firms are limited by marginal rule and internalise activities up to the point where internal management costs equal the cost of transacting in the markets.

Second is the perspective that firms are a group of capabilities. Here we must mention the authors in 16. Authors like those cited in 17 differentiated between resources and the services they render. Resources can provide a variety of productive services. In turn, the provision of these services can modify the attributes of the resources and enable the provision of new services. In this sense, the firm is considered as a collection of productive resources featured the disposal of which between different uses and over time is determined by administrative decisions [18]. The fact that there is heterogeneity rather than homogeneity of both human and material productive services implies that firms are unique. Finally, the limits are defined by the nature of the firms managerial and administrative responsibilities.

Third, 19 defined a firm as the ownership of or the property rights to a firm. Therefore, the limit of the firm is when one person has all the risk of the economic activity. With this approach, the firm is conceived as a set of assets under common ownership and control. One problem with this definition is that, as employees are not a possession of the firm, they would not be considered as part of the firm. Highly complementary assets should be owned in common the owner of these assets should be the person to provide the investment incentives for the best use of these complementary assets [20]. This view provides an answer to where the limits of the firm should lie since they coincide with decisions about physical asset ownerships.

Finally, the firm can be defined in terms of its sphere of influence as stipulated by 21 extended the boundaries of the firm to other agents that are in direct contact with the firm, such as distributors, alliance partners and suppliers. From this perspective, the emergence of the firm is response to problems causing delays [hold-up problems], given the intrinsic opportunistic nature of human actors and the specialised nature of assets required for the efficient productions. As we can see, the firm is difficult to define because its influence is multiple. For the purpose of this internship report, we define the firm as the ownership of assets that is the third definition above. However, we will not consider employees as belonging to the firm. This means that we will not consider employees as belonging to the firm. This means that we will not consider employees to be autonomous individuals with their own incentives. This definition, closely related to Hart's definition, is often used in research [22].

2.3.2 Measure of Firm Size

One of the main challenges in every discipline is to homogenise the criteria for classifying its units of observation. The analyses of firm growth are no different ways of measuring the growth of a firm. This diversification is sometimes due to the purposes of each author but, more usually, it is due to lag of data [23]. The main problem is therefore the difficulty in making comparisons with other studies. In fact, the empirical literature uses a wide range of measures whose use depends on the purpose and subject of the data. The authors in 24 and 25 found similar growth indicators found similar growth indicators used in empirical literature. Some of these indicators are;

- The financial or stock market value
- The number of employees
- The sales and revenue
- The productive capacity
- The value of production
- The added value of production

Although all of these parameters are highly correlated [in other words, when a firm increases the benefit of its production it also increases its stock value], not all of them react so quickly to external or internal changes. For example, it is obvious that sales are more volatile than productive capacity because firms can generally modify their assets. For example, 26 compared three measures [employment, assets, and sales] and showed that they are interchangeable because they produce the same results when tested over a seven-year period.

However, each variable can paint a different picture of the firm. These may be interesting depending on the purpose of the research. We can therefore select the most suitable variable for our interests. Therefore, as our objective is to measure the firm's economic activity, we will see whether the above variables explain this internal process.

- The revenues of the firm do not provide any information about its internal process but show the prices and the quantities sold in the market.
- Sales are easily available and relatively insensitive to capital intensity. However, there are unsatisfactory indicators because they can be influenced by a firm's arbitrary decisions [marketing strategies, financial decisions, etc.]. Moreover, they can also be influenced by the decision to vertically integrate certain production processes and are sensitive to inflation and currency exchange rates [27].
- Added value may be a better variable since it explains the capacity of the process to increase the value of the output. It therefore quite a good indicator of internal activity. Unfortunately, however, added value is sometimes not publicly available for individual firms.
- Assets can also define the size and growth of a firm. However, as we stated earlier, there are more rigid to changes in the internal process of the firm and may not be a good explanatory variable.
- As stated by the author in 28, the number of employees is the most widely used measure of size. The number of employees reflects how the internal process is organised and adapts to changes in

activity. Moreover, employment is not sensitive to inflation or currency exchange rates. Scholars agree that this variable is a direct indicator of organisational complexity and is suitable for analysing the managerial implications of growth [29].

The best variables for measuring firm size are therefore added value and number of employees. As we have mentioned, the problem with added value is that there is usually a lack of information. The only problem with using the number of employees is that it does not consider the growth in labour productivity. Depending on the problem at hand, other variables may also be possible. For example, economic activities directly to tourism may have alternatives measures, such as the capacity of supply [the number of beds, etc.]. However, authors such as those in 30 pointed out that different growth “measures and calculations affect model building and theory development differently”.

Obviously using a measure such as the number of employees has several disadvantages. The authors in 30 mentioned that the number of employees does not reflect “labour productivity increases, machines for man substitution, degree of integration, and other make or buy decisions”.

Firm growth as measured by a difference in number of employees has led to analysis of aspects such as labour policies, labour market evolution and job creation. In this sense, 31 argued that the limitation of using only the number of employees has led to an is not important since all measures of size are highly correlated.

2.4 Empirical Study

This section will discuss on the empirical evidence or study made by other researchers in the field of accounting software or information technology. Thus, the empirical will involve the following;

2.4.1 Accountants’ Perceptions of the Use of Excel Spreadsheet in Financial Reporting: A Survey of Accounts Personnel in Manufacturing Firms

Research Methods

The survey research method was adopted in this study. It was designed to investigate accountants’ perception of the importance of spreadsheets in the preparation of financial reports. Survey research is concerned with identifying real nature of problem and formulating relevant hypothesis to be tested. Data were collected from professional chartered accountants with more than ten spreadsheet usage experience. Professional accountants were chosen because of their usage of spreadsheets consistently in course of carrying out their roles as providers of business information to various users irrespective of the firms and industry.

Sampling procedure

The participants were selected by random sampling; it was adopted because it obtains a representative sample from the population. Authors such as 31 explained that random sampling is one in which all the members of the population have equal chance of being selected from the sample as every other member and in which the

selection of an individual for the sample did not influence the chances of any other individual of being chosen. The criteria to participate in this study were that [a] Participants must have been using spreadsheet for financial reporting for at least ten years in the manufacturing sector [b] the participants must have good knowledge of peculiarities of spreadsheets, [c] the participants were ready to provide information required.

A random sample of fifty [50] participants were drawn from pool of chartered accountants working in the Apapa Business District. Fifty [50] respondents were chosen because it representative enough for the research work given the prevalence of the application of spreadsheets among firms even among accountants with access to accounting software's. Data for the study were obtained through the primary source. The primary data were generated through self-administered questionnaire. A pilot survey was adopted for the reliability test and it yielded correlation coefficient of 0.72. In testing the hypotheses, descriptive analysis was conducted to test the questionnaire responses, the survey consisted of identical questionnaires shared among the aforementioned participants. All questionnaires were returned, because this researcher personally collected questionnaires one after the other with not more than two respondents in an office. It was structured in line with the research questions and hypotheses.

Relevant statistical tools such as the percentages and tables are used for the data analysis. The hypotheses were analysed using a survey questionnaire with a - 5 Likert scale response options of Strongly Agreed [SA], Agreed [A], Neutral [NE] Disagree [D], and Strongly Disagreed [SD] with weights of 5,4,3,2 and 1 respectively with statistical significance are above 80% very highly significance, 60%-80% highly significance, 40%-59% medium significance, 20%-39% low significance and below 20% no significance. From the data collected, 55% of respondents combines spreadsheet usage with accounting software in financial reporting; 30% use spreadsheets as standalone accounting program and 15% use accounting software exclusively. For the purpose of this study, the population mean has been set at '3', which is the average of an equal representation of all the possible responses. The descriptive analysis of the responses is presented in tables 1 and 2 showing calculated statistical indicators such as percentages, weighted arithmetic means, ranking, statistics and standard deviations.

Test of Hypothesis 1: There is no positive relationship between use of spreadsheets and the quality of financial reports turned out by accountants.

Table 1 below shows the responses of experienced chartered accountants with above average knowledge of spreadsheet usage with 70 % [40% strongly] agreeing to that assertion. The basic attributes/quality of financial reporting [relevance, timeliness, reliability, faithful representation, verifiable and understand ability] as propounded by Ogundana and his colleagues [2015] were all admitted with significant acceptance by all respondents with at least 60% affirmation that spreadsheets are useful tools of analysis.

Statements 2-4, and 7-9 seek to evaluate if there is a relationship between use of spreadsheets and the quality of financial reports turned out by accountants. The statements are positive descriptions of the attributes of financial reporting with the use of spreadsheets, respondents had option of agreeing or disagreeing with each statement. The means of the scores of responses range between 3.22 and 3.7, all more than the paper's population mean of '3' and with a standard deviations ranging between 1.43 and 1.58, which could be considered as moderate when

compared to a mean of three in a '1' to '5' range analysis. This points to the fact that accountants irrespective of the errors and control risks associated with spreadsheets rely on them to prepare quality financial reports. However, from statements 5 and 6 show that errors are inherent in such report, responses indicate such with the mean of 2.6 less than the expected 3, even with adjustments done as stated in statement 6, the quality of the financial report will be below required standard. Hence from these results and a weighted mean 3.5, it can be concluded that there positive but weak relationship between use of spreadsheets and the quality of financial reports turned out by accountants due to inherent errors and manual adjustment thereof. To further demonstrate the relationship, the calculation of the correlation is done using the Pearson Product Moment Correlation Coefficient [r]: We have the following result: $n=50$, $\Sigma x=309$, $\Sigma x^2=5545$, $\Sigma y=141$, $\Sigma xy=1815$, $\Sigma y^2=1627$, $[\Sigma x]$

$$^2=95481, [\Sigma y]^2= 19881 \quad r=47,181/105,703.16 \quad r= 0.45$$

This estimate of 0.45 above showed that, there are weak correlations between use of spreadsheets and the quality of financial reports turned out by accountants. This indicates the presence of errors, potential errors and control risks distort the supposed quality attributable to financial reports prepared with spreadsheets. From these results, we can accept the first hypothesis, which confirmed that there is positive but weak relationship.

Hypothesis 2: There are no measures put in place to mitigate the inherent errors hindering the full utilization of spreadsheet resources among accountants

3. Methodology of the study

3.1 Research Design

Research design is plan or strategy, which helps in arranging the resources required for research purpose. They design acts as a guideline for the research in other words it is a sequential step to be followed by a researcher at times characterised with technics of analysis. They design decision in respect to the following terms

- What is the study about?
- What to study in a particular topic?
- Where would the study be conducted?
- The technics to collect the relevant data.
- What would be the sample design?
- How would be the data analyse?
- What is the time required?

The sketch of how research should be conducted can be prepared using research design. Hence, the market research study will be carried out on the basis of research design. The design of research topic is used to explain the type of research [experimental, survey, correlational, semi experimental, review] and also its sub type [experimental design, research problem, descriptive case study]. There are three main sections of research design: data collection, measurement, and analysis.

3.2 Methods of Data Analysis

Data analysis has two prominent methods that is qualitative and quantitative research methods. Each method has their own techniques, interviews and observations are forms of qualitative research, while experiments and surveys are forms of quantitative research method.

3.2.1 Quantitative Research

Quantitative research is defined as the systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical or computational techniques. Quantitative research gathers information from existing and potential customers using sampling methods and sending out online surveys, online polls, questionnaires etc., the results which can be depicted in the form of numerical. After careful understanding of these numbers to predict the future of a product or service and make changes accordingly.

Quantitative research is mostly conducted in social sciences using the statistical methods to collect quantitative data from the research study.

3.2.2 Qualitative Research

Qualitative research is defined as a market research method that focuses on obtaining data through open ended and conversational communication. This method is not only about “what” people think but also “why” they think so. The results of the qualitative research methods are more descriptive and inferences can be drawn quite easily from the data that is obtained.

Qualitative research methods are designed in a manner that they help reveal the behaviour and perception of a particular audience with reference to a particular topic. There are different types of qualitative research like an in-depth interview, focus groups, ethnographic research, content analysis, case study research that are usually used

3.3 Targeted Population

It's a study of a group of individuals taken from the general population who share a common characteristic, such as age, sex or health conditions. They population targeted were the Workers of Cabinet NYECK but questionnaires were also distributed to other institutions who are clients of the Cabinet. But little or no responses were obtaining from them due to lack of time and willingness. Thus those who are involved in this study or the main targeted population sited for this study are the workers of the organisations in which this research study was conducted [Cabinet NYECK].

3.4 The Sample Size

The sample size refers to the number of participants or observation included in a study. This number is usually represented by *n*. The size of a sample influences two statistical properties; The precision of our estimates and

The power of the study to draw conclusions.

The sample size of this study comprise of the

- The Chartered Accountant
- The Associate Accountant
- Mission director
- Assistant mission director
- Training and Studies divisioner
- Assistant training and study divioner
- Accounting and tax divisioner
- Assistant accounting tax divisioner
- The Secretary General
- Assistant secretary general [Cashier]
- General Administrator
- Audits and Judicial accountant
- Assistant audit and judicial accountant
- Maintenance agent

Making a total of 14 persons responding to the questionnaires.

3.6 Data Analysis and Presentation

Data analysis as well as its interpretation was carried out using descriptive-statistic methodology and linear multiple regression analysis method with the assistance of the SPSS software. Regression analysis got applied to indicate the significant relationships between dependent variable and independent variable. It also helped indicate the magnitude of impact with regards to multiple independent variables on the study's dependent variable. The model used the formula below:

$$\hat{Y} = a + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Y refers to growth, which is the due dependent variable.

a is the regression constant. This means it is the value of y when $X_2 = X_1$. β_1, β_2 refer to changes in Y with respect to a unit fall or increase in X_1 and X_2 respectively.

X_1 represents the influence of financial performance,

X_2 represents the influence of management decision,

ε refers to an error term since some unspecified variables might also the growth of Cabinet NYECK.

Presentation of data was made with the use of tables, pie charts and bar graphs.

3.7 Source of Data Collection

Data collection is a stand out amongst the most essential research stages in carrying on a research. You can have the best research plan in the world; however, in the event that you cannot gather the necessary data you will not have the capacity to complete your venture. Data collection is an extremely challenging work, which needs exhaustive planning, diligent work, understanding, determination and more to have the capacity to complete the assignment effectively. Data collection begins with figuring out what sort of data is needed, followed by the collection of a sample from a certain section of the population. Next, you have to utilise a certain tool to gather the data from the chosen sample.

3.7.1 Primary Data Collection

Primary data will be the data that you gather particularly with end goal venture. Leverage of primary data is that it is particularly customised to your analysis needs. A drawback is that it is costly to get hold of. Primary data is otherwise called raw information; the information gathered from the first source in a controlled or an uncontrolled situation. Cases of a controlled domain are experimental studies where certain variables are being controlled by the analysis.

The source of data collection is the most populace test from which you can gather the information. The initial phase in the process is deciding your target populace.

3.7.2 Secondary Data Collection

This is data that is already found by the others and can be used other than for the purpose for which it had being collected this includes; textbooks, internet, newspapers, past reports and magazines. You can break the sources of secondary data into internal as well as external sources. Inner sources incorporate data that exists and is stored in your organisation. External data refers to the data that is gathered by other individuals or associations from your association's outer environment

3.8 Methods of Data Collection

In the processing of the work to be carried out, primary data were carried out through questionnaires established after some experiences at the enterprise, interviews with the Chartered accountant and the assistant chartered accountant, mission director, the training and study divisionary and other employees in general and mostly the data was collected through observations. Secondary data are through diverse sources such as; textbooks, internet, past reports.

3.8.1 Sources of Primary Data Collection

Questionnaires: A questionnaire is a research instrument that consists a set of questions or other types of prompts that aims to collect information from a respondent. These typically are a mix of close ended questions and open ended questions; long form questions offer the ability for the respondent to elaborate their thoughts.

The Statistical Society of London developed questionnaires in 1838.

The questionnaire of this research study was having a section made up of demographic questions such as gender, marital status; work experience and a section were the contained structures items relating to the research questions and objectives. AS said above the question were mix close ended and open-ended employees at Cabinet NYECK were each given a questionnaire form to study and fill. All the employees were questioned irrespective of age, sex and status.

Personal Interview: The type of research conducted by the researcher was both open and close interview. Open interview was carried out with employees in general during break or when, difficulties were encountered. While interview was carried, out with administrative staff members, chief accountant and the director. These interviews were freely conducted during break at work or out of working hours.

Observations: Observations started from the 1st day of the internship and throughout until the last day that is 01st September 2020 to the 02nd January 2021. This was done through collection of data by observing and taking notes. The advantages of observation include flexibility in generating permanent records situations.

4. Presentation, analysis and interpretation of data

A hypothesis is tentative answer to research a question or a problem. There are two types of hypothesis, that is the null hypothesis and the alternative hypothesis, which have no effect on the independent and dependent variable. While the alternative hypothesis states that, there is an effect of the independent variable on the dependent variable or the two are related.

The data was analysed using the Pearson correlation coefficient and using the adequate software. When the correlation is positive, that is r is close or equal to 1, it means there is strong correlation which means that independent variable has a strong relationship on the dependent variable. On the other hand, if the correlation is close to less than one, there is a weak correlation. Furthermore, in order to determine the strength of the relationship whether it is strong, moderate or weak, we need to come out with the correlation coefficient. In order for us to decide whether to accept or reject the alternative hypothesis, we need to come out with a decision role. We shall be testing the following hypothesis

Hypothesis ₁: Ms Excel has a positive influence the finances of Cabinet NYECK.

Hypothesis ₂: Ms. Excel has a positive influence the management decision of Cabinet NYECK.

4.1 The Influence of Spreadsheets on the Growth of Cameroonian Firms

Here, the first objective is to measure if there exist a relationship between Spreadsheets and the growth of Cabinet NYECK. To achieve this, we are going to use the correlation matrices in order to measure the said relation and to be able to determine the influence of spreadsheet on the growth of Cabinet NYECK. The table below shows this relation.

Table 4.21: Correlation coefficient

		Spreadsheets [Ms Excel]	Financial performanc e	Management Decision
Spreadsheets [Ms Excel]	Pearson correlation	1	.261 [*]	.413 [*]
	Sig. [2-tailed]	.204	.000	.000
	N	14	14	14
Finances	Pearson correlation	.261 [*]	1	.367 [*]
	Sig. [2-tailed]	.002	.136	.001
	N	14	14	14
Management Decision	Pearson correlation	.413 [*]	.367 [*]	1
	Sig. [2-tailed]	.000	.332	.013
	N	14	14	14

***. Correlation is significant at the 0.1 level [2-tailed]**

Correlation measure strength and the direction in the linear relationship between the two variables; It is range between +1 to -1. Which indicated a perfect relationship, which is highly negative as well as highly positive. In addition, the 0 relationship shows that the data is no correlation. In the table, N shows that these the respondent and population size in the data. High correlation mean the relationship is more strong toward the strong relationship. In addition, shows significance level in the data as well. In the table Spreadsheets is strongly relate with finance and management decisions. The table above shows that, spreadsheet has a positive and significant relationship on the growth with a correlation coefficient [r] of 0.413. This means that if spreadsheet is being allocated, it will positively affect the growth of Cabinet NYECK. We equally see from the correlation table has a positive and significant effect on the management decision with the following correlation coefficients [r] 0.367 at 5% level of significance. We shall hence proceed to verify the concordance of these results econometrically using the Ordinary Least Square regression as given below. From the Ordinary least square Regression, we shall present the effect of the different variables of spreadsheet on the growth of Cabinet NYECK. The table below will show us the regression results between spreadsheet [captured using MS Excel] and growth which will be seen in a manner that, a unit variation of these Ms Excel will lead to a variation of the growth according to their respective regression coefficient as seen on the table below. The regression result will be presented in a manner to permit us verify our hypothesis, hence we are going to have regression results for the different spreadsheet against the growth variables and secondly, we shall have the results showing the relationship between Ms Excel against the growth of Cabinet NYECK.

4.2 Presentation of results from the Ordinary Least Square [OLS] regression

The results from the regression analysis will be presented in 2 dimensions, firstly with respect to the first objective of the research which is to determine the influence of Spreadsheets on the growth of Cameroonian

firms. And secondly, to determine the influence of spreadsheet on the growth of Cabinet NYECK as given below,

4.3 Results Regression analysis

Regression analysis permits us to verify the influence of each of our independent variables on our dependent variable. The table below gives the regression model summary results. It presents the R- value which is the measure of association between the dependent and the independent variables, the R-Square which is the coefficient of determination measuring the extent at which the independent variables affect the dependent variable as well as the Adjusted R-Square which measures the reliability of the regression results. The table below shows results of our regression.

Table 4.22: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,704 ^a	,713	,836	,26637114

Source: author's finding

We see from the table above that our coefficient of determination R square is 0.713, which means that 7.13% of the growth of Cabinet NYECK is explained by our independent variables [spreadsheet]. This shows that our model is good and is well explained by our independent variables. We are going to verify the global significance of this model using the ANOVA test.

Table 4.23: The ANOVA test

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	09.687	4	13,611	124,700	,000 ^a
	Residual	04.313	10	,188		
	Total	14,000	23			

Source: Author's finding

We see that globally our model is good; the critical value of our F-statistics is significantly greater than that in the table of t- statistics thus indicating that globally our model is good.

4.4 The influence of Ms Excel on the financial performance and management decision of Cabinet NYECK

From the Ordinary least square Regression, we shall present the effects of each of the different dimensions of growth of Cabinet NYECK were used.

Table 4.24: Regression between, Ms Excel and Different Growth of Cabinet NYECK

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	[Constant]	3.204	1.563		7.751	.000
	Ms Excel	.422	.035	.057	.684	.000
Dependent Variable: Growth of Cabinet NYECK						

Source: computed by author

Linear regression is the next step after correlation. It's used how the value is predicting and one value is based on the other variables. The variables, which the data is predicted is called dependent variables some time, called outcome variables. The study reveals spreadsheet through Ms Excel highly influences their level of growth of Cabinet NYECK. This implies that the management must ensure that promotions in the organisation are done fairly to encourage consistency.

5. Summary of findings, recommendations and conclusions

The final chapter aims to sum up the details provided in the earlier chapters. It takes a quick look at the key findings from the interview conducted, which have generated exceptionally interesting results with the help of the previous chapters and has further provided a large room for future studies.

5.1 Summary of Findings

5.1.1 The Influence of Spreadsheets on the Financial Performance of Cabinet NYECK

Spreadsheets have revolutionised the accounting system and practices of business in the world and Cameroon is not an exception. That is Spreadsheets have affected the growth of Cabinet NYECK by; project management, account management, performance management, output efficiency and budgeting spending help.

Thus it could be seen that 28.60 percent of the respondent saw performance reporting and output efficiency to be the main factors which affect the growth of Cabinet NYECK. Remembering all the business financial details is not a simple task, this is one of the reasons to use Spreadsheet for the business because the Cabinet uses

Spreadsheet for business growth. And Spreadsheet have an influence on financial performance through multi users option that is you can be able to work with multiple team members, so your team members are staying up to date with business data thereby increasing the output efficiency of the firm.

Followed by 21.40 percent of the respondent who budgeting and spending help to be the main factor which affects the financial performance of the Cabinet. That is the organisation can properly its cost or expenditures and being able to forecast future incoming cash or future outgoing cash.

Then we have 14.30 percent of the respondent who sees account management to be the next factors which influences the financial performance of Cabinet NYECK. That is by automating as many tasks as possible so that they personnel can do what they do best which is offering excellent services to both internal and external customers.

Finally, we have 7.10 percent of the respondent who sees project management as to be the last factors which affect the financial performance of the Cabinet NYECK. That is, it enables to manage by exception by providing cost revenue amounts but also financial information.

5.1.2 The Influence of Spreadsheets on the Management Decision of Cabinet NYECK

The use of computer technology has made a tremendous impact in all sectors of life like in the accounting field. IT came out with or brought out the creation of Spreadsheets like Ms Excel which was meant to facilitate the life of the accountant more than any other accounting tool. Ms Excel affected Cabinet NYECK by having an influence on the business analysis, strategic analysis, people management, office administration then finally we have managing programs. Thus, it was understood that 28.60 percent of the respondent saw business analysis and strategic analysis to be the main factors which influences the management decision of Cabinet NYECK so far as it concerns excel. Ms excel have an influence on management decision by facilitating business analysis and strategic analysis through the work of companies that is by reducing the number of hours and days managing huge amount of data and finance due to the different excel formulas. Because of those formulas business professionals would not waste time calculating everything manually and Ms excel also have an impact on data analysis by analysing data in a more performant way.

Then we have 21.40 percent of the respondent who see that office administration to be one the important factor which affects management decision making. That is extracting data from different departments and consolidating that data and summarising the information so that it aids company management to make the best decisions making can be through excel. Followed by 14.30 percent of the respondent saw that people management were the next factors which affect the management decision of the Cabinet. Because nowadays accountant and bookkeeper is required to have advanced knowledge of Ms Excel there by creating a data base with advanced excel functions which the makes the job easier. That is through the possibility of creating payslip of employees and client data base and growth through these analysis personnel management become easier with the help of human resource analysis done through Ms Excel.

5.2 Conclusions

Accounting which is the basis for effective financial performance and management decision has been generally termed as the language of business throughout the world. Electronic spreadsheets have made a major contribution to financial analysis and problem solving processes. Decisions made using these tools often involve substantive consequences for the organizations. However, academic literature reveals that experienced professionals and students make many errors when developing spreadsheets. Practitioners recognize the importance of accuracy and have published many techniques they use for improving the accuracy of their spreadsheets

References

- [1]. Winston, W.L. [1999]. Financial Models Using Simulation and Optimization, Newfield, NY: Palisade Corporation.
- [2]. Winston, W.L. [2004]. Operations Research [4th edn], Belmont, CA: Brooks/Cole, pp. 262–95.
- [3]. Raković L., Sakal M., Pavlicevic V. [2014]. Spreadsheets - How It Started International Scientific Journal of Management Information Systems, 9 [4], 09-14.
- [4]. Galletta, D. F., Hartzel, K. S., Johnson, S., & Joseph, J. L., 1996-1997, "Spreadsheet presentation and error detection: an experimental study." Journal of Management Information Systems, Winter, pp. 45-63.
- [5]. Jelen, B. [2005]. The Spreadsheet at 25: 25 Amazing Excel Examples that Evolved from the Invention that Changed the World. Uniontown: Holy Macro! Books.
- [6]. Lawrence A. Gordon [1976], Contingency theory and design of accounting information system, university of Maryland, professor of managerial accounting and information assurance 4332F Van munching hall.
- [7]. Walkenbach, J. [2004]. Microsoft® Office Excel 2003 Power Programming with VBA, Indianapolis, IN: John Wiley.
- [8]. Kenmoe Y.P Joyce [2019], Contribution of accounting software on the productivity of accounting firms: case study SIMS international academic internship report.
- [9]. Power, D. J. [2004], "A Brief History of Spreadsheets", DSSResources.COM, World Wide.
- [10]. Lawrence A. Gordon [1976], Contingency theory and design of accounting information system, university of Maryland, professor of managerial accounting and information assurance 4332F Van munching hall.
- [11]. Microsoft. [20.5.1996.]. More Than 30 Million Users Make Microsoft Excel. The World's Most Popular Spreadsheet Program. Retrieved February 7, 2012 from Microsoft
- [12]. McMullen, J. F. [n.d.]. How Spreadsheets Changed the World: A Short History of the PC Era. Retrieved February 24, 2012 from Techopedia:
- [13]. Power, D. J. [2004], "A Brief History of Spreadsheets", DSSResources.COM, World Wide.
- [14]. Raković L., Sakal M., Pavlicevic V. [2014]. Spreadsheets - How It Started International Scientific Journal of Management Information Systems, 9 [4], 09-14.
- [15]. Shaukat, M. and Zafarrulah, M. [2009], Impact of Information technology on organisation performance; an analysis of quantitative performance indicators of Pakistan's banking and Manufacturing companies. European journal of Economics, finance and administrative sciences, 16, 36-42.

- [16].Walkenbach, J. [2004]. Microsoft® Office Excel 2003 Power Programming with VBA, Indianapolis, IN: John Wiley.
- [17].Walkenbach, J. [2010]. Excel 2010 Power Programming with VBA. Indianapolis: Wiley Publishing.
- [18].Jelen, B. [2005]. The Spreadsheet at 25: 25 Amazing Excel Examples that Evolved from the Invention that Changed the World. Uniontown: Holy Macro! Books.
- [19].Kenmoe Y.P Joyce [2019], Contribution of accounting software on the productivity of accounting firms: case study SIMS international academic internship report.
- [20].Kurt Jechlitschka, Dieter Kirschke and Gerald Schwarz [2007].Microeconomics using Excel Integrating economic theory, policy analysis and spreadsheet.
- [21]. CORREA, 1999 Creeth, R., 1985, "Microcomputer Spreadsheets: Their uses and abuses." Journal of Accountancy, June, pp. 90-93.
- [22]. Davis, P., 1997, "What computer skills do employers expect from recent college graduates?" Technological Horizons in Education Journal, September, pp. 74-78.
- [23].Galletta, D. F., Hartzel, K. S., Johnson, S., & Joseph, J. L., 1996-1997, "Spreadsheet presentation and error detection: an experimental study." Journal of Management Information Systems, Winter, pp. 45-63.
- [24]. Albright, S.C. [2001]. VBA for Modelers: Developing Decision Support Systems with Microsoft® Excel, Belmont, CA: Duxbury Press, pp. 63–105.