



## **Businesses' Choice for an Accounting Software**

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## Abstract

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<p>Every business whether small, medium, or big needs a tool to help organize and keep a record of its Finances. Before computers and digitalization, it may have been a notebook, but nowadays almost every business relies on accounting software.</p> <p>This research-based thesis aims to study how companies choose their accounting system. To reach the required conclusion, the author studied theoretically the different types of accounting systems and studied the structure of the accounting department in different companies. The study also included the possible job positions that companies may have in the field of finance and accounting, the hierarchy between the positions, and the tasks.</p> <p>This thesis consists of a theoretical and empirical part. The theory part aims for developing a good understanding of what is accounting software in general, its features, and types and how does accounting sector operate in a company, and the structure of the accounting department in companies. The empirical part focuses on data collected to answer the research objective.</p> <p>The study employs qualitative research techniques in the form of a fully structured interview. The respondents are professionals in the field of accounting. An interview section will be carried on collecting data on how companies decide on choosing the right accounting software</p> <p>The overall conclusion of the results was presented in the form of findings, which did include patterns and features that companies pursue when choosing an accounting system. The conclusion was also presented in the form of two tables that did summarize features that meant the most for the companies and industry-specific features that companies needed as a must.</p>
<b>Keywords</b> Computerized Accounting Information System, ERP, Bookkeeping, Accountant

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## **1. Introduction**

This is a research-based bachelor's thesis for the Degree Programme in International business in the major specialization of Finance and Accounting at the Haaga-Helia University of Applied Sciences.

In this chapter, the main topic of the thesis will be introduced with emphasis on its importance and relevance in general and in relation to the Finance and accounting field of specialization. Thus, it will provide a clearer vision and understanding of the topic. Then a deeper look at the aim of the thesis while laying down the main research question/ project objective and dividing it into Investigation questions, followed by demarcation which will explain what will be focused on and included later in the body. At the end of this chapter, a list of key concepts will be defined to familiarize the reader with the field.

### **1.1 Background to the topic**

Every business whether small, medium, or big needs a tool to help organize and keep a record of its Finances. Before computers and digitalization, it may have been a notebook, but nowadays almost every business relies on accounting software. Accounting is a critical component of running a successful business enterprise. Accounting software brings together under one roof all of the systems and applications that are involved in the management and processing of financial data. It automates the key computations and administrative operations, as well as takes control of the revenue structure, allowing businesses to avoid the need to outsource financial management. (Gupta 2020.)

### **1.2 Research question**

Businesses rely on accounting software through different positions in their business, such as bookkeeper, accountant, and controller, to help produce and formulate essential information and get their financial tasks done. In this Thesis, the focus will be to figure out how organizations and businesses make a decision on which accounting software to use. While also covers the importance of accounting software by having an understanding of the history, tasks, advantages, and how it operates in more detail.

The outcome of the thesis is an analysis of how businesses choose accounting software while gaining deep knowledge on accounting software and how much of a necessity they are through different positions in a business, also covering different aspects.

The research question (RQ) of this thesis can be put as ‘How do businesses choose an accounting software and how do they justify its need?’

To reach an answer to the research question, the following investigative questions (IQ) are researched:

IQ 1. What is the company’s history with accounting software?

IQ 2. What are the most important tasks the accounting software is used for?

IQ 3. What is the structure of the accounting and finance department in SMEs?

IQ 4. What job positions rely on the use of accounting software? Define them and their tasks and access level to the software.

IQ 5. What is the process of choosing accounting software?

IQ 6. What factors are considered when choosing accounting software?

The overlay matrix below displays the investigation questions, relevant theoretical framework components, the research methodologies that were employed, and the relevant chapter where the findings are discussed

Table 1. Overlay Matrix

Investigative question	Theoretical Framework	Research methods	Results (chapter)
<b>IQ 1. What is the company’s history with accounting software?</b>	Definition History Types Tasks Cost-benefit analysis Opportunity cost	Qualitative Methods: Literature, Interviews Respondents: accounting department	4.2.1
<b>IQ 2. What are the most important tasks the accounting software is used for?</b>	Definitions Tasks	Qualitative Methods: Interview Respondents: Accounting department staff	4.2.2

<b>IQ 3. What is the structure of the accounting and finance department in SMEs and medium to large businesses?</b>	Legal Business process and adaption Costs	Qualitative Methods: Literature, Interviews Respondents: accounting department	4.2.3
<b>IQ 4. What job positions rely on the use of accounting software? Define them, their tasks, and their access level to the software.</b>	Accounting Business Process Definitions Tasks  History	Qualitative Methods: Literature, Interviews Respondents: accounting department	4.2.4
<b>IQ 5. What is the process of choosing accounting software?</b>	Legal Business process and adaption Costs	Qualitative Methods: Literature, Interviews Respondents: accounting department	4.2.5
<b>IQ 6. What factors to consider when choosing accounting software?</b>	AI advancement Process Risk analysis Cost-benefit Analysis	Qualitative Methods: Literature, Interviews Respondents: accounting department, Providers	4.2.6

### 1.3 Delimitation or Project scope

To limit the scope of the thesis, the literature review and research will focus on how businesses choose the right accounting software, the author will avoid going outside two main topics company's accounting department and accounting software. In the Empirical part, the author will not cover and extract data from companies outside of his home country Lebanon. The author started by concentrating and digesting accounting software in detail by covering topics that are related solely to them like definition, history, tasks, and more.

Then the focus will be on the importance of accounting software through different job positions. accounting software can be used through different position titles in a business like a controller, bookkeeper, or auditor.

After that, Focus will be then shifted towards the structure of the accounting sector in different company sizes and industries, and the Factors that affect choosing accounting software.

#### 1.4 Benefits

Working in most accounting and finance major job positions whether, in a big corporate, small, or medium business, and even as a freelancer requires some knowledge of accounting software. In some positions, it is an essential and the job can not be done with the required knowledge in that software.

As the author and a small entrepreneur who manage his finance and accounting and works on some clients at the same time on the side, it is highly valuable to have deep knowledge of how accounting software is used and taken advantage of in different position. This is also helpful when seeking a job position if that's an intention.

Another main benefit is having a look at how different companies do the same thing in different ways, which would make you see things from different perspectives and thus give you the ability to make better decisions and choices.

#### 1.5 Key concepts

**Computerized Accounting Information System** or as known as Accounting software is a type of software that processes the financial transactions and events of a business, making sure that they are as per Generally Accepted Accounting Principles (GAAP) to store data and produce reports. Accounting systems can be manual or computerized, they both work under a set of well-defined concepts called accounting principles. The operating environment of accounting software is the framework of storage and data. It consists of hardware and software. In which the accounting software, both hardware, and software are independent. (ncert 2019.)

**Bookkeeping** is a discipline within financial accounting that refers mainly to the recordkeeping aspects of accounting, the process of recording all the detailed information regarding transactions and other activities of a business. (Boyd 2018, 34.)

**Enterprise Resource Planning (ERP)** is integrated software that integrates information from all parts of a business into a single database. It stores key data of multiple departments and enables a flow of the data between different modules. This approach eliminates the problems associated with having different independent department software for each that does not share information. (accounting tools 2021.)

**Accountant** The term accounting is a broad term, it enters the realm of designing the bookkeeping system, providing controls to ensure that the system is working well, and also analyzing and verifying the recorded information. Accountants give orders and bookkeepers follow them. (Boyd 2018, 34.)

**Automation** is a word used to describe technological applications in which the need for human intervention is reduced. This covers the automation of business processes, Information Technology automation, and personal applications such as home automation. In information technology, the implementation of a repeatable set of procedures may boost productivity and efficiency while decreasing the likelihood of a human mistake. (IBM 2019.)

## 2. Use of Accounting Tools

The main topic of this chapter is the theoretical framework of the thesis, in other words, it can be described as a knowledge base. This chapter aims to summarize the theoretical knowledge base that provides the understanding needed to design, implement, analyze and interpret the empirical research part. Moreover, it will provide more details about concepts, terminology, models, and theories relevant to the thesis. Thus, giving more clarity and providing more understanding to the thesis.

Figure 1 below shows the factors in selecting accounting tools and key concepts. The theoretical frameworks consist of accounting software, finance, and accounting department in a business, and Factors of choice, with special emphasis on automation role also as a factor.

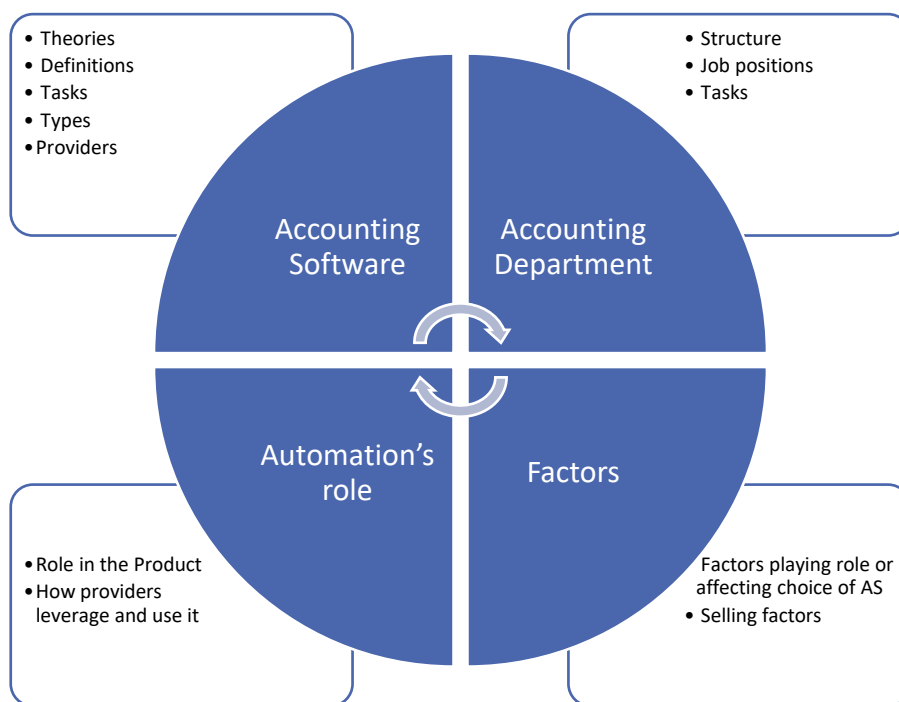


Figure 1: Factors of Selecting Accounting Tools.

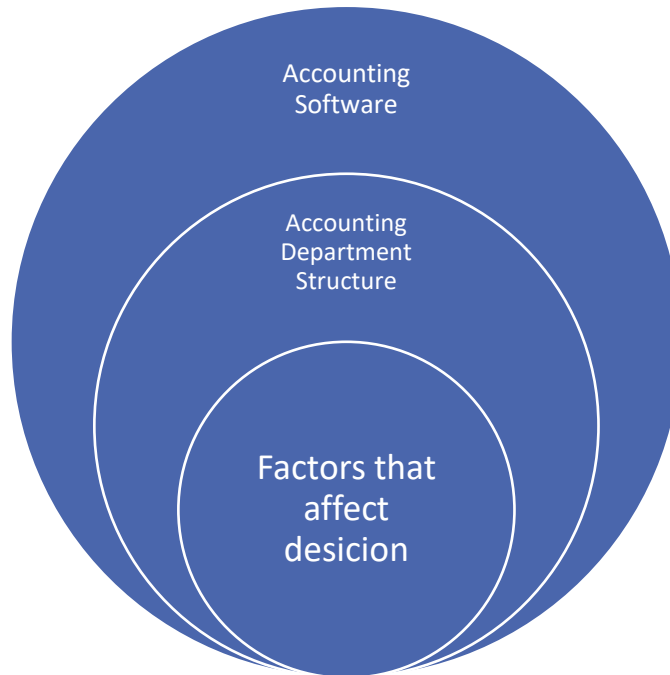


Figure 2: Hierarchy of Selecting Accounting Tools.

The Objective of the thesis is to find out How do businesses choose accounting software and also how they justify its need. Based on that, at the beginning as a starting point theories describing Accounting software and accounting in general are introduced providing an understanding of the topic, from definition to tasks, types, and more. After that, the structure of the accounting sector in different company sizes is explained while also explaining What job positions rely on the use of accounting software and defining them and their tasks.

At this point once there is an understanding of accounting software as a product and its domain, and good knowledge of the structure of the finance and accounting department from the company's side. The next step will be analyzing what role Automation as one of the biggest catalysts in the innovation of accounting software as a product play in a business's choice for accounting software and how providers advertise it while studying and listing different providers in this domain. Then a section on factors to be considered when choosing accounting software.

## 2.1 Accounting Function

For many years, the accounting function has been solely responsible for processing the entirety of a company's transactions. The processing of consumer billings and supplier invoices has been from the significant ones in these transactions. Even though these two sections account for the majority of transactions, asset tracking has long been delegated to the accounting function. This does involve transactions that fall under the movement of cash, inventories, and fixed assets. Finally, the accounting department has been in charge of debt tracking, which entails keeping track of debt levels using debt instruments as well as payments made to decrease debt. The accounting staff's transaction-based operations have been these. (Bragg 2010, 7.)

The corporate world has gotten increasingly globalized. Many businesses are conducting more and more business with companies in other nations. Because a corporation must now assess gains and losses on sales to foreign nations, accounting becomes much more complicated. There might also be bartering deals with organizations that don't have easy access to currency. In addition, if there is no distinct finance function, accounting personnel may be relied upon to manage letters of credit and hedging transactions, which are aimed to limit the risk associated with international deals. All these problems need a level of expertise that was not necessary for the days of basic transaction processing. (Bragg 2010, 7.)

As a result of rising competition, many firms are merging or acquiring subsidiaries in the current market. As a result of needing to oversee a slew of new operations in a variety of locations, the accounting staff's tasks become significantly more difficult to do. This involves developing procedures and processes for how receipts, shipments, and currency should be processed. After each reporting period concludes, it becomes significantly more difficult to complete the financial books due to the increased burden placed on the accounting staff, who must now gather and consolidate information from several subsidiaries. To avoid all the above challenges, a firm may choose to consolidate its accounting facilities into a single central processing site. However, management expertise is still necessary to integrate diverse accounting systems into one seamlessly operating facility. This is not a straightforward undertaking. The climate of mergers and acquisitions significantly increases the skill requirements for the accounting staff members. (Bragg 2010, 8)

While it is vital to recognize the increased number of duties presently performed by the modern accounting function, it is equally crucial to recognize how the role of the accounting staff has evolved in connection to the rest of the organization.

At a time when the number of accounting duties was more tightly defined around transaction processing, it was typical for accounting employees to be placed in an out-of-the-way area of a company, where they would be able to work without being impeded by the activities of other departments. As a result of the increased number of responsibilities and tasks, the accounting staff is now engaged in significant business decisions.

## **2.2 Accounting Software**

In the history of accounting, advancements have been made to attain maximum efficiency while also improving accuracy, as well as to accommodate global expansion in trade and business. Technology-driven advancements have transformed practically every industry, and accounting is no exception! Traditional accounting procedures utilizing huge binders are no longer attractive to organizations today since they fail to provide assurances regarding authenticity, data security, and accuracy. The popularity of Accounting Software solutions, which make the entire process dependable, simple, automated, and frictionless, is on the rise nowadays.

A company's financial health may be assessed using accounting software, which is a critical instrument in this process. It is usually thought of as a program that keeps track of how money moves for internal and external auditing and accounting, as well as for other purposes. (Goodfirms 2021.)

When it comes to the actual history of accounting software, accounting has been around for hundreds of years, and accounting has long been a highly regarded profession. Books were kept on paper ledgers and file systems in the old days, and bookkeepers utilized them to record transactions such as debits, credits, income, and costs. Machines began to play a part in accounting in the late 1800s, and with the introduction of computers in the twentieth century, the profession was completely altered. Adding machines, which were first developed in the 1880s, did not have any computer characteristics or storing capabilities; rather, they streamlined the counting process and were widely utilized by accountants and bookkeepers at the time of their introduction. Tabulating or punch-card devices captured data by punching a different pattern of holes onto cards, which were then stored in a filing cabinet. These machines could decipher the pattern and use it to get the relevant information. (4sight 20XX.)

The first spreadsheet software was made by VisiCalc in the late 1970s. This made bookkeeping software more general and easier to use. Financial modeling could now be done on a computer because of this, making it possible. When Peachtree Software came up with an accounting

software package for early personal computers in 1978, they made it so that it could run on these computers. As time went on, a lot more businesses started to see the value of buying a computer. This meant that businesses could use computers to keep track of their finances for a fraction of the price of buying a mainframe. In 1981, Peachtree came out with the first online bookkeeping software for the public. It came with a standard word processor and a spreadsheet. Accounting software for people to use was first made by Intuit in 1983. The Quicken line of software was made for people to use. Intuit made an interface that was simple for people who aren't accountants to use. By 1985, PCs and accounting software had become an important part of many businesses around the world. (4sight 20XX.)

### **2.2.1 Features**

The process of documenting, evaluating, classifying, reporting, and interpreting financial transactions and information is known as business accounting. It is the method through which a company maintains track of its activities.

To capture a company's overall financial picture, corporate accounting entails a wide range of tasks. It's a hard and time-consuming task when done manually. Accounting software, on the other hand, has aided in the simplification of these procedures. (Zoho 2022.)

Accounting software performs a variety of accounting and bookkeeping functions. The majority of current accounting software is constantly online. Also, different accounting software may be used for a variety of purposes and to do different things.

Accounting software may enhance your business in a variety of ways, each with its own set of advantages and disadvantages, based on its primary features and aims. Everything from a simple operation like invoicing to a complicated tax reporting system is included with accounting systems, many of which are not even possible without a proper accounting system.

To help better understand accounting software, below are some of the functions you should be familiar with:

#### **1. Core Accounting:**

Accounting fundamentals include accounts payable, accounts receivable, and a business's general ledger. These are the foundational financial records that are used to track all your business's transactions.

While fundamental accounting is crucial for every firm, it is especially critical for emerging businesses, which often have less revenue and greater debt. However, there is more to it than keeping

the books in order; small firms may automate basic accounting procedures to collect and submit payments using artificial intelligence more effectively. (Hale 2019.)

## 2. Financial Reporting:

Accounting for financial reporting refers to standard practices that are used to provide stakeholders with an accurate representation of a company's finances. This includes revenue and expense information as well as profits, capital, and cash flow information. Financial reporting is also referred to as records in a formal style that provide detailed insights into financial data

The financial reporting component of accounting software assists firms in tracking and visualizing important performance indicators. This covers financial documents like balance sheets, profit and loss (P&L) statements, and expense reports, among other things.

Organizations may more quickly spot patterns with the in-depth, AI-driven reporting features provided by accounting software, which helps to improve the decision-making process and increase the profitability of the firm. Those kinds of insights provide start-up companies with a solid, fact-based platform on which to develop, as well as the tools they need to achieve long-term success. (Hale 2019.)

## 3. Bank Reconciliation

The practice of comparing bank statements to the data of the account holder is known as bank reconciliation. For better or worse, it ensures that a company's financial information is accurate. The automation built into accounting software streamlines the importing of electronic bank statements, reducing what would otherwise be a time-consuming operation to a matter of minutes.

## 4. Payroll Management

Payroll administration is the process of calculating, processing, and distributing wages to employees regularly. The payroll feature built into accounting software is intended to save your company valuable time and money by automating the process. Growing firms will find this to be particularly valuable as their employment base continues to grow in size.

## 5. Billing and invoicing

Today's accounting software facilitates not only the preparation and distribution of invoices but also the implementation of increasingly complex sales processes. This encompasses a wide range of recurrent transaction types, such as contract- and subscription-based services, as well as other repeating transaction kinds.

As your company's client base expands, the number and diversity of sales—as well as the time it takes to process them—will increase accordingly. The billing and invoicing component of accounting software automate these processes, making them more precise and efficient. (Hale 2019.)

#### 6. Expense Management

Expense management includes the submission, processing, and tracking of costs incurred while doing work-related tasks. Businesses may create expense reports using accounting software, allowing them to have a more comprehensive understanding of how their money is being spent.

To keep track of all the scheduled flights, capital investments, and client dinners, developing enterprises want a system that can keep up with their ever-increasing spending. Business executives may be confident in their ability to discover possible cost reductions and investment possibilities thanks to the extensive expense analysis provided by accounting software.

#### 7. Budgeting and Forecasting

Business owners may plan their budgets in line with forecasting models with the aid of accounting software's budgeting and forecasting features. The program makes use of artificial intelligence and historical data to discover trends and anticipated outcomes in areas like income, costs, and cash flow, among others.

Business executives need to establish their budgets on the most accurate information they can find, and current forecasting technology gives them the confidence to invest in their company's future.

#### 8. Fixed Asset Management

Businesses can use fixed asset management to keep track of capital assets and property such as office buildings, machinery, and corporate cars. Additionally, they may be used to monitor the depreciation of tangible assets over time.

The fixed asset management component of accounting software provides a thorough view of a business's property, including its worth, condition, insurance status, and other tools for preventing asset loss. (Hale 2019.)

#### 9. Multi-Currency Support

Because of the multi-currency support feature, companies may automatically convert between currencies, allowing them to take payments in legal tender other than their own, generate quotes, and issue invoices in another legal tender. Users can also indicate the individual preferences of their consumers, allowing for smooth international transactions regardless of the currency in which they are conducted.

## 10. Inventory

Inventory levels should be monitored to identify high-volume goods and maintain them well-stocked. Accounting software Help Organize your inventory by including critical information such as the SKU, product picture, vendor information, price, and quantity on hand. Keep track of your products from the minute they are created. Enabling inventory tracking enables you to keep a constant eye on your supply levels. Real-time inventory tracking

Instantly adjust your inventory when damaged or missing stock occurs. Keeping inventory levels current simplifies shelf counts. Maintain control of your inventory with accurate inventory reports.

At any moment, you may view your stock holdings and current valuation. Accounting software also determines the value of your inventory using different methods like the first-in-first-out (FIFO) approach. (Zoho 2022.)

### 2.2.2 Types Of Accounting Software

Before selecting which accounting software package to use, it is critical to understand the many types of accounting software available and when each type of software should be utilized. There are several general classes of accounting software, which are detailed in the following list.

#### 1. Spreadsheet

A spreadsheet, also known as an electronic worksheet, is a type of computer application that organizes data in the form of a graph by dividing it into rows and columns. Formulas, commands, and formats may be used to alter each row and column. This tool is particularly beneficial for accountants, financial analysts, and business professionals who need to assess business performance data and results.

A small firm may be successfully conducted entirely based on an electronic spreadsheet as its accounting software. Even though the spreadsheet software is affordable, and the system may be built in virtually any way, Spreadsheets, on the other hand, are prone to mistakes since information can be entered in the wrong place, improperly, or not at all, resulting in inaccurate financial statements. As a result, spreadsheets are often exclusively utilized by organizations that have extremely low transaction volumes, such as small businesses.

Accountants most commonly use Microsoft Excel, which is a spreadsheet tool developed by Microsoft. Initial development of this product occurred in the 1990s as part of the Office Suite software bundle, and it has since become the industry standard.

#### 2. Commercially available software

Commercial off-the-shelf software (COTS) is the most extensively utilized kind of computer software today in accounting worldwide. It is fairly adjustable to a business's requirements, has numerous levels of error detection to avoid improper data input, and generates standard reports that can typically be customized to the user's needs. There are COTS multilevel marketing programs tailored to various sectors, with additional features to meet the demands of their target audiences. COTS software may need the assistance of consultants to install and maintain, as well as a long installation procedure and on-site workers. Accounting software that is provided as an online service, which needs customers to connect to the vendor's site to use the program, is a variant of this concept. Rather than purchasing the program upfront, the latter model needs monthly payments of a per-user subscription. (Accountingtools 2021.)

Three basic types of commercial software are:

- **Turnkey systems** are ready-to-use systems that have been fully finished and tested. They are usually general-purpose systems or systems that are tailored to a certain sector. In any scenario, the end user must follow normal business procedures that allow off-the-shelf solutions to be used. The best turnkey systems come with built-in software options that allow the user to modify the input, output, and processing via menu selections. Configuring the systems to match user demands, on the other hand, can be a difficult undertaking.
- **Backbone systems** are made up of a fundamental system framework that may be built upon. The provider creates the user interfaces to fit the client's specific demands after having the preprogramming of the primary processing logic commercially ready. A backbone system is a middle ground between a custom and a turnkey solution. This method can yield good results, but it is costly to customize the system.
- The term "**vendor-supported systems**" refers to custom (or customized) systems that client companies purchase from a commercial vendor rather than developing in-house. In this model, the software vendor is responsible for the design, implementation, and maintenance of the system for its customer. This is a popular option when it comes to health care and legal services firms with complicated systems requirements that are not of sufficient scale to warrant the need for in-house systems development professionals. For many firms, outsourcing has become a popular choice, particularly those who had previously depended on in-house development but have now decided to outsource these efforts.

### 3. Enterprise Resource Planning Software (ERP)

ERP software collects data from several departments inside a firm into a single database. This technique avoids the issues associated with department-specific software that does not exchange

data. It is, however, extremely costly and may take more than a year to deploy. Typically, only the biggest and most complicated enterprises use this software.

ERP systems are often built around a single, specified data structure (schema) and a shared database. This enables the enterprise's information to be standardized and based on common definitions and user experiences. These fundamental components are then integrated into business processes driven by workflows across business divisions (e.g. finance, human resources, engineering, marketing, and operations), bridging the divide between systems and their users. Simply said, ERP is the means through which a contemporary enterprise's people, processes, and technology are integrated. (Oracle 2021.)

#### 4. Custom Accounting Software

This software is created specifically for a company. This strategy is normally employed only when an entity's demands are so particular that a COTS or ERP solution cannot meet them. Custom software, on the other hand, is more likely to be problematic and require more maintenance than commercially available programs.

### 2.2.3 Accounting Information System AIS

Associated with information technology resources, and Accounting Information System (AIS) is a computer-based approach for recording accounting activities. Finance and accounting data are collected, stored, and processed by AIS for use in internal management decision-making, including nonfinancial activities that have a direct impact on the processing of financial transactions. (Belfo 2013, 2.)

Financial transactions are processed by AIS subsystems, as are non-financial transactions that have a direct impact on the processing of financial transactions. For instance, changes in customers' names and addresses are processed by the AIS in order to keep the customer file current and accurate. While these are not technically financial transactions, they give critical information for processing future client sales. (Hall 2010, 8.)

The AIS is built on three key subsystems:

- (1) The transaction processing system (TPS), supports everyday business activities by providing a variety of reports, documents, and messages to users across the business.

The TPS is the heart of the information system because it converts economic events into financial transactions, records financial transactions in the accounting records (journals and ledgers), and distributes important financial information to operations staff to help them with their daily operations.

The TPS deals with business events that happen frequently. An example is that sometimes the company might have to deal with a transaction that happens on a certain day. To deal with such a volume of transactions, the same types of transactions are grouped into transaction cycles. The TPS has three transaction cycles: the revenue cycle, the expenditure cycle, and the conversion cycle. Each cycle has three parts: In each cycle, different types of money transactions are recorded and processed.

(2) The general ledger/financial reporting system (GL/FRS), generates conventional financial statements such as the income statement, balance sheet, statement of cash flows, tax returns, and other reports needed by law.

The general ledger system (GLS) and the financial reporting system (FRS) are two subsystems that are extremely tightly tied to one another. They are, however, commonly regarded as a single integrated system, referred to as the GL/FRS, due to their operational interdependence. The transaction cycles provide the vast majority of the data input to the general ledger element of the system. The General Ledger System (GLS) processes summaries of transaction cycle activity in order to update the general ledger control accounts. Other events that are not frequent like mergers, stock transactions, and law settlements, may not have a formal processing cycle in place, yet also enter GLS from an alternate source.

The Financial Reporting Standard (FRS) measures and reports the status of financial resources, as well as changes in those resources. It is mostly external users who are informed by the FRS of this information. This sort of reporting is referred to as nondiscretionary reporting since the organization has few or no options when it comes to the information it delivers. A large portion of this information comes in the form of typical financial statements, tax filings, and other legal papers, among other things. (Hall 2010, 9.)

(3) The management reporting system (MRS), provides internal management and delivers special-purpose financial reports and information necessary for decision-making, such as budgets, variance reports, and responsibility reports. (Hall 2010, 9.)

The MRS is responsible for providing the internal financial information required for the management of an organization. Most daily company issues must be dealt with on the spot by managers, who must also plan and supervise their operations in the process. Managers require different types of information for the many types of decisions that they must make in their positions. Budgets, variance reports, cost-volume-profit assessments, and reports based on current (rather than historical) cost data are examples of the types of reports generated by the MRS. The term

"discretionary reporting" refers to the fact that the organization has the ability to pick what information to report and how to convey that information. (Hall 2010, 9-11.)

**MIS**, Management Information Systems (MIS) frequently require information that AIS cannot supply. When a company grows in size and complexity, specialized functional areas emerge, necessitating the collection of additional data for purposes such as production planning and control, sales forecasting, inventory warehouse planning, market research, and so on. The management information system is responsible for processing non-financial transactions that are not typically handled by a regular accounting information system (MIS). (Hall 2010, 9.)

#### **2.2.4 Acquisition of information systems**

Organizations' methods of acquiring information systems These organizations often do this through two methods: (1) they construct customized systems from scratch through in-house systems development efforts, and (2) they acquire preprogrammed commercial systems from software providers. In-house development is more common among larger firms with specific and constantly changing requirements. The system development life cycle is the formal process through which this is done.

#### **2.3 Organization structure**

Based on the size of the organization, you may have several employees executing a single function or a single person performing numerous roles. Examples of how these functions could be divided up in firms of varying sizes are shown below.

In the beginning, startups may not need a full finance department; however, as the company expands and its finances get more complex, the startup may need to recruit a small staff to assist them in managing the finances of the business. Several departments will most likely be represented by these individuals. During the early stages of a business, the CFO and the controller are often the same individuals. Moreover, in addition to his or her strategic planning duties, a CFO may be required to conduct financial planning and analysis (FP&A). (Paro 2022.)

Companies of a small size: The majority of enterprises of this size do not have the need or the financial resources to recruit a full-time finance team. Though they may collaborate with a

bookkeeper and/or accountant, the company owner(s) is typically responsible for all aspects of record-keeping and money. Despite the fact that small businesses are unlikely to have a full-time internal finance staff, they may choose to contract with part-time finance specialists, such as a fractional CFO, to help them scale. (Paro 2022.)

**Business Sizes from Midsize to Big:** As a company grows in size from midsize to large, the positions and responsibilities within the finance department will begin to become more clearly defined. Each member of the finance team will be responsible for one of the four financial tasks, and there will often be whole teams of employees dedicated to each specialized responsibility. (Paro 2022.)

As mentioned in the beginning finance department's organizational structure is dictated by the size of the firm, which is mostly governed by whether it is a small, medium, or a big corporation. But in general, a chief financial officer (CFO), a vice president, one or more accountants, and a budget analyst are the most common organizational structures.

The chief financial officer, often known as the CFO, is the executive in charge of the finance department, which implies that this person is at the very top of the organizational structure. The chief financial officer (CFO) is not only the leader and the person to whom everyone in the finance department reports to, but he or she is also in charge of the company's overall financial planning and providing guidance on how to put the plan into action. (Lorette 2022.)

The chief financial officer (CFO) reports to the company's CEO. He or she also collaborates with the heads of other departments, such as human resources, manufacturing, sales, marketing, and production, as well as any other departments that make up the organization. For planning reasons, the CFO meets with the leaders of all of these departments. Each department has certain requirements for carrying out its duties, and the finance department is responsible for developing, managing, and distributing finances from the corporate budget to satisfy all of these requirements. (Lorette 2022.)

A big publicly traded company's Financial Department organization chart comprises Budgets, Financial Analysis, Accounting, Investor Relations, and Treasury, with all of these sections reporting directly to the CFO. The General Manager or CEO, on the other hand, is in charge of Management Control and Audit.

In banking, it is common to have a separate division that oversees all back-office operations. Because of the sector's unique character, the Financial Department is separate from the rest of the division and reports directly to the CEO.

Depending on the industry and the size of the firm, the Management Control Department may be located inside the Financial Department or may be located outside of it, reporting directly to the Chief Executive Officer. (pedersenandpartners 2016.)

The Figure below represents

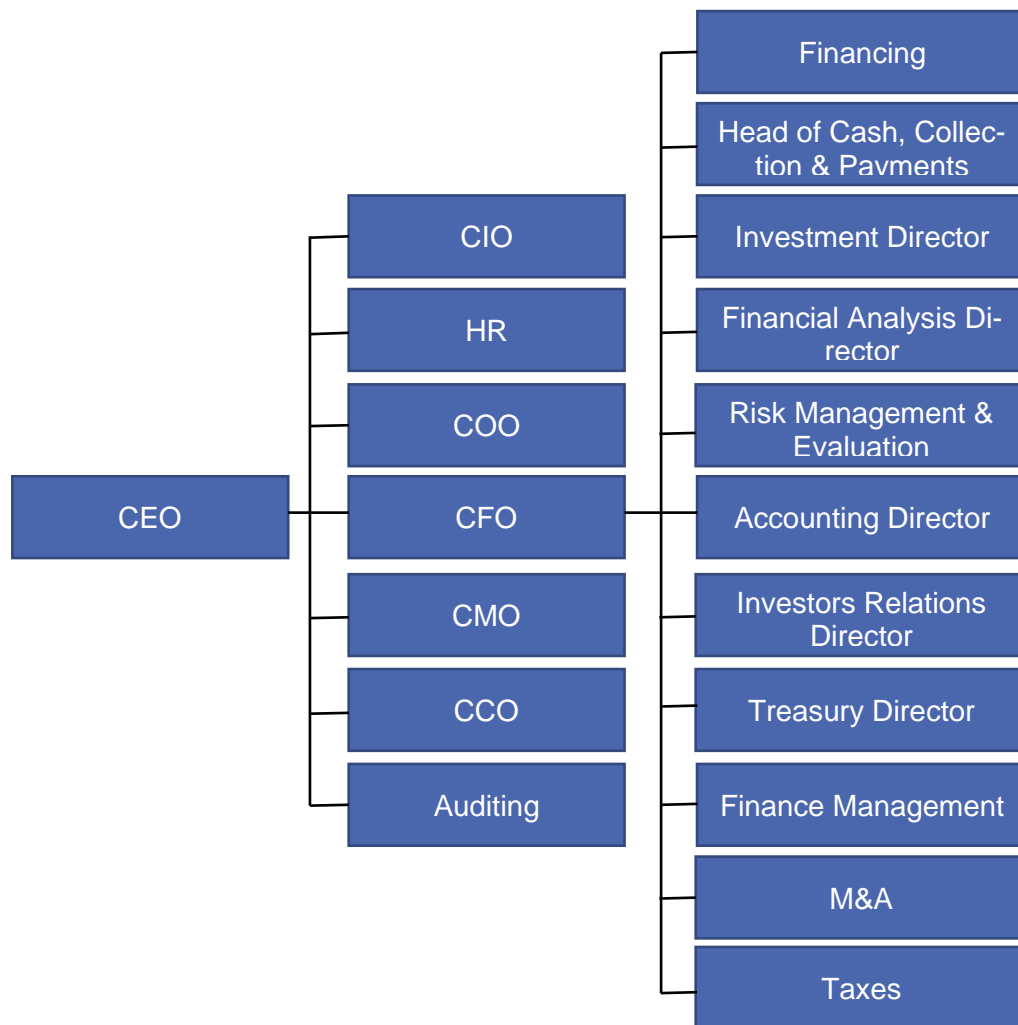


Figure 3: Centralized CFO, Large company

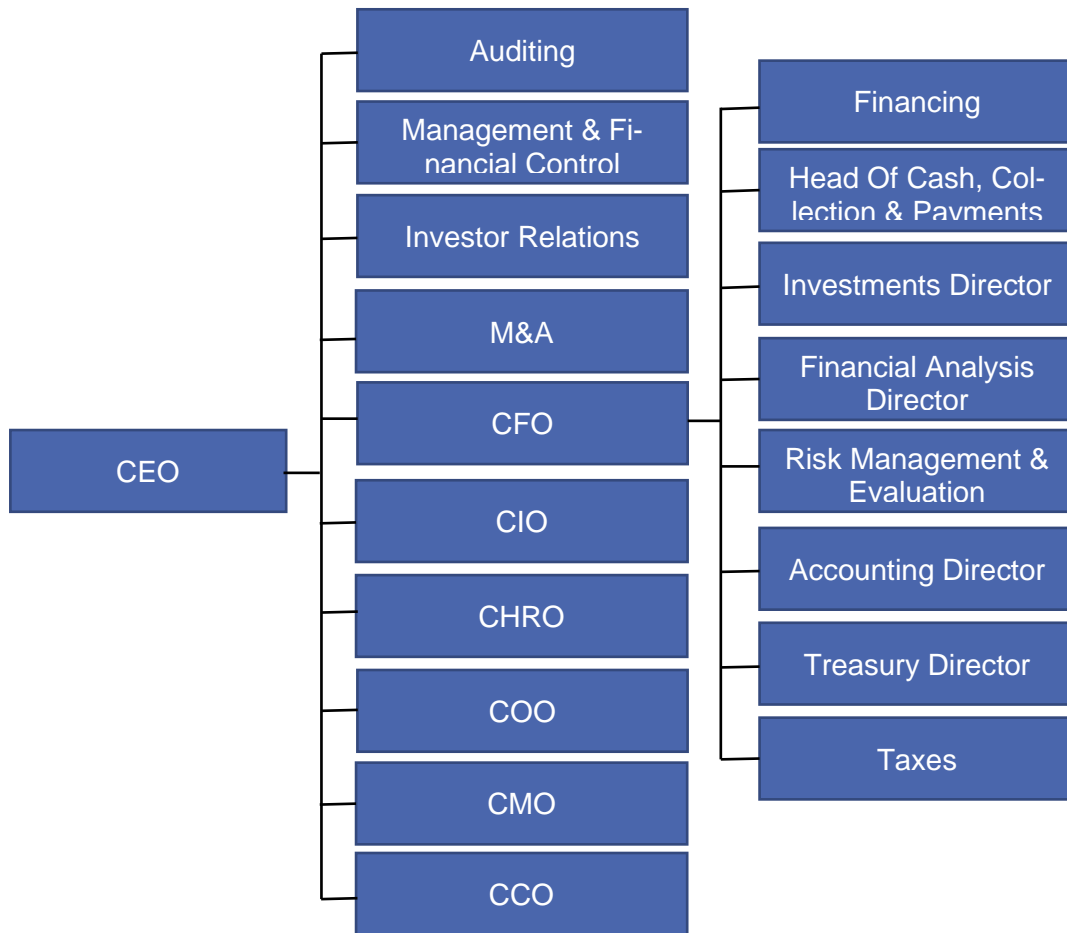


Figure 4: Decentralised CFO, Large Company

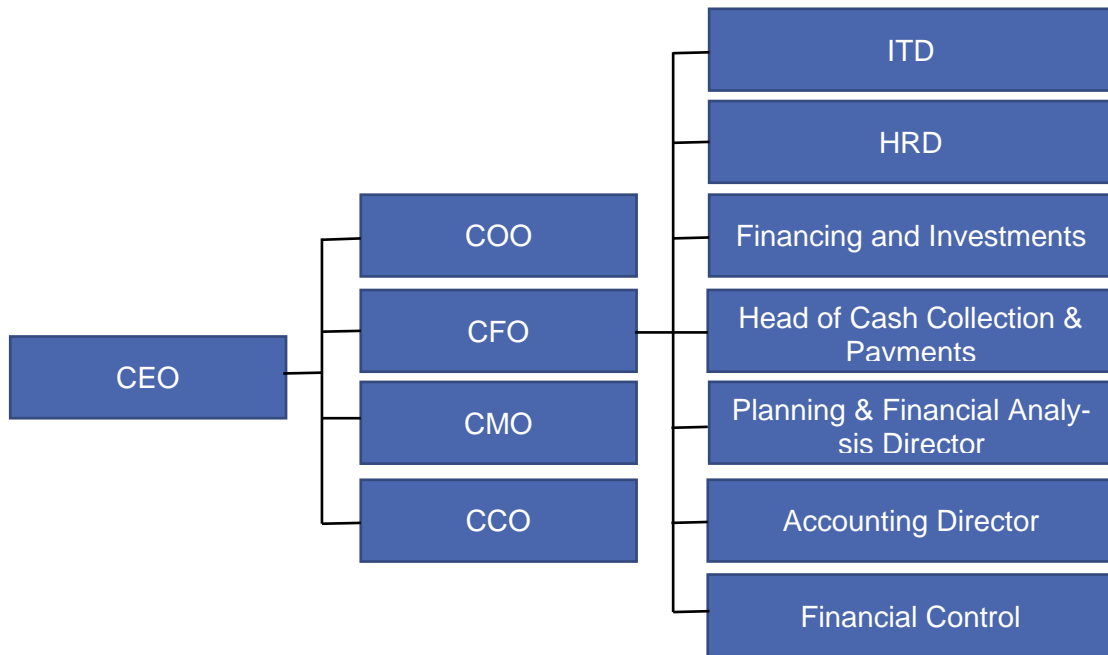


Figure 5: CFO, Midsize company

## 2.4 Job Descriptions

The number of responsibilities given to each employee will become more specialized as an accounting department grows. Fixed asset accounting, expenditure reports, and SEC reporting specialists may exist in a bigger firm, and this personnel performs nothing else. This section does not try to define the job descriptions of these smaller "niche" roles; rather, it offers an overview of the duties and reporting linkages that may be found in a medium-sized accounting department.

### 2.4.1 Chief Financial Officer

The head of the financial department and the highest-ranking financial expert in an organization, the chief financial officer (CFO), is in charge of the company's financial health. Building a top-notch finance and accounting team, ensuring revenues and expenses stay in balance, overseeing FP&A functions, making mergers and acquisitions recommendations, obtaining funding, working with department heads to analyze financial data and craft budgets, attesting to the accuracy of reports, and consulting with boards of directors and the CEO on strategy are the CFO's responsibilities but there could be more.

The Chief Financial officer reports to the Chief Executive Officer.

His responsibilities are :

- The CFO's role is to assist the CEO in developing and implementing strategies that will generate incremental new shareholder value year after year.
- The CFO is accountable for providing strong functional leadership to the Company's Finance, Tax, Treasury, Pensions, and Investor Relations departments, communicating to them the Board's expectations regarding the Company's objectives, culture, values, attitudes, and behaviors, and ensuring that operational policies and practices assist in appropriately driving those. (Smiths Group plc 20xx)
- Make arrangements for debt and equity financing.
- Build and maintain dependable control systems.
- Create a financial and tax strategy.
- Develop performance metrics that are aligned with the company's strategic goals.
- Best operational practices should be implemented.
- Invest funds.
- Invest pension funds.
- maintain adequate insurance coverage.
- Keep banking relationships strong.
- manage the capital request and budgeting procedures.
- Manage the departments of treasury, accounting, investor relations, taxation, and human resources.
- Monitor financial reports.
- Oversee the issuance of financial data.
- Supervise due diligence on acquisitions and negotiate deals. Understand and mitigate the company's risk profile's key elements.

#### 2.4.2 Controller

Traditionally, the controller has been in charge of supervising the accounting department, reviewing systems, and delivering financial statements. The role has grown significantly, as the accounting function as a whole is now expected to take on additional responsibilities, collaborate more closely with other departments, provide ongoing advice to senior management, and adjust systems and controls to meet the changing needs of other parts of the company. All of these changes have had a significant influence on the controller's job inside the company. (Bragg 2012 6-7.)

The essential element is that the controller must be very proficient in interdepartmental transactions owing to the greatly increased engagement with other departments. This entails

frequent interactions with other department heads, participation at meetings, and the expression of opinions on a number of matters pertaining to the functioning of functions with which the controller had previously had no involvement. Because of the shift in responsibility, the controller now needs excellent interpersonal and managerial skills, the former to communicate with other departments and the latter to oversee the accounting department's enlarged responsibilities. (Bragg 2012 6-7.)

The role of a controller varies greatly depending on the size of the organization and whether or not additional managers are in charge of similar duties. If a corporation is tiny and there are few other managers, the controller's job description may include a hefty list of responsibilities. As a firm expands in size, however, the job becomes more exact and carefully defined. (Bragg 2012 13.)

The controller reports to the chief financial officer (CFO).

his role and responsibilities are:

- Controllers are responsible for the development and maintenance of the integrated plan of operation, which is one of their primary responsibilities. The controller's major responsibility is to serve as the coordinator in charge of putting together and maintaining the plan.
- Verify and Check to see if the revenue plan can be accomplished.
- Verify and Check to see if the production plan works with the sales schedule. This includes comparing how much is expected to be sold to how much is going to be made, taking into account how much-finished goods are already on hand. Judgment towards the ability of the production operation to boost its output is also needed. With Skill levels, bottlenecks, raw material sources, and more all need to be taken into account. (Bragg 2012 15-17.)
- Verify that expense levels are in proportion to other activities.
- Check that the company is allocating sufficient funds to the appropriate range of research and development initiatives, including a balanced mix of low- and high-risk projects.
- Check to see if the proposed activity has enough funds. The strategy must be reworked on a lower scale if there is insufficient debt or equity capital.
- Approve the budget for the accounting department.
- Approve the development of new reporting formats and systems.
- As needed, assist with the yearly audit.
- As needed, attend executive committee meetings.
- Authorize the acquisition of accounting capital.
- Meet with top management to discuss financial results and performance.
- Carry out the auditor's recommendations.
- Manage functions that have been outsourced.

- Organize the accounting team and manage its staff.
- Provide management with advice on the implications of acquisitions.

(Bragg 2010 13.)

### 2.4.3 Treasurer

The treasurer is in charge of the association's financial operations and is responsible for their oversight. This individual is in charge of the association's finances, securities, and financial records, and he or she is a guardian for them. The treasurer should have a reasonable grasp of financial accounting principles and methods. Ensuring that bills are paid, deposits are made, and financial statements are generated in a timely manner is done by the person in charge of this function. The preparation of the yearly budget is also the responsibility of the treasurer, who is also in charge of supervising the association's tax filings and conducting annual audits as necessary. On rare occasions, the treasurer may be tasked with researching investment strategies for the organization's reserves. The duties of the treasurer are stated in the association's bylaws and/or the state statute, just as they are for the other officers in the organization. (Barber, Gaskill 2008 89.)

The Treasurer reports to the Chief Financial Officer (CFO).

His role and responsibilities are:

- Advise the management team on the liquidity implications of its short- and long-term planning initiatives.
- Preparing for both equity and debt financing
- Make sure that enough Financial funds are available to satisfy continuing operating and capital investment requirements.
- Forecast cash flow positions, associated borrowing needs, and available money for investment.
- Invest funds.
- Pension funds to be invested.
- Maintaining banking relations.
- Maintain ties with credit rating agencies.
- The ability to maintain a set of policies and procedures that impose an acceptable level of control over treasury activities is essential.
- Keeping tabs on the operations of third-party vendors that perform outsourced treasury duties on the company's behalf.

- The provision of credit to consumers.
- Hedging can be used to reduce financial risks associated with interest rates on a company's borrowings as well as hazards associated with the company's foreign exchange positioning.

(2) (Bragg 2010 13.)

#### 2.4.4 Investor Relations Officer

Investors Relations Officer Reports to Chief Financial Officer.

His role and responsibilities are:

- Produces presentations, media releases, and other communication materials for earnings releases, industry events, and presentations to analysts, brokers, and investors.
- Develops and manages an investor relations plan for the firm.
- Develop and monitor performance measures for the investor relations function.
- Establishes and maintains working relations with representatives from the stock exchange.
- In charge of the investor relations section of the company's website.
- Monitors analyst reports and prepares summaries for presentation to senior management.
- Conferences, road shows, earnings conference calls, and investor meetings are all organized by Investor Relations Officer.
- Responsible for overseeing the creation of all annual reports, SEC filings, and proxy statements for the organization.
- Performs a thorough examination of the competition, including financial indicators and differentiating characteristics.
- Provides management with input on the company's impression by the investing community and other information.
- Provides input to the management team on the impact of stock repurchase plans and dividend modifications on the investing community.
- All firm spokespersons get Regulation Fair Disclosure training.
- Incorporates the opinions of the investor community into the development of a corporate strategy for the management team.
- Serves as the primary point of contact for members of the investment community.

(Bragg 2010 14.)

#### 2.4.5 Assistant Controller

Assistant Controller reports to Controller.

His role and responsibilities are:

Analysis Responsibilities:

- Compiling the cash projection is one of your
- Initiate enhancements to best practices.
- As needed, generate internal management reports.
- Maintain control of the annual budgeting process.
- Oversee functions that have been outsourced.
- As needed, provide financial evaluations.
- Examine the systems for control flaws.
- Supervise the work of the cost accountants team and its staff.
- Supervise the work of the financial analysis team and its staff.
- Supervise the work of the systems analysts team and its staff.

Financial Reporting responsibilities:

- Implementing best practices improvements.
- Prepare financial statements in a timely manner.
- Oversee functions that have been outsourced.
- Examine capital acquisition proposals.
- Supervise employees who work in the general ledger.
- Staff in charge of public reporting should be supervised.
- Supervise employees who are responsible for filing tax returns.

Transactions related responsibilities:

- Implementing best practices improvements.
- Keep an organized accounting file system.
- Oversee functions that have been outsourced.
- Supervise the accounts payable department.
- Supervise the accounts receivables department.
- Supervise the payroll department.

(Steven M. Bragg 2010 14)

#### 2.4.6 Cost Accountant

Cost Accountant reports to Assistant Controller.

His role and responsibilities are:

System Tasks:

- Costing systems should be audited.
- Examine and review the appropriateness of activity-based costing systems.
- Examine-in and review the data collection systems' adequacy.
- Examine and review the costs and advantages of the system.

Analysis and reporting tasks:

- Assist with the budgeting process.
- Report on ABC's overhead allocations.
- Breakeven points for product and division are detailed and reported.
- Requests for capital budgeting should be reported.
- Reports on product's and division's margins.
- Periodic variance analyses should be reported on.
- Report on product costing targets.
- Report on special assignments that may include special topics.

Pricing tasks:

- Update product pricing with the help of marketing staff.

(Bragg 2010 13- 15.)

#### 2.4.7 Credit Manager

The credit manager reports to Controller Assistant.

His Role and Responsibilities are:

- Make a model for credit scoring.
- Maintain the credit policies of the company.
- Manage the credit files of business customers.
- Maintain contact with credit insurance companies.
- Manage the sales department's relationships.
- Organize the charging of late fines.
- Organize and manage the corporate financing program.
- Performance of the department should be measured.

- Monitor credit reports on a regular basis.
- Keep track of the credit-granting and credit-updating processes.
- Provide for the continued education and training of credit personnel.

(Bragg 2010 13- 15.)

#### 2.4.8 Billing and Collections Supervisor

The billing and collections supervisor reports to the assistant controller.

His role and responsibilities are:

- Approve invoice write-offs
- Make certain that accounts receivable are collected as soon as possible.
- Ascertain that client billings are issued as soon as possible.
- Estimate and evaluate the number of the bad debt reserve.
- Best practices should be implemented in order to boost efficiency levels.
- Manage and supervise Billing and collections personnel under your supervision.
- Cash receipts are used to predict cash requirements.

(Bragg 2010 13- 15.)

#### 2.4.8 Accounts Payable Supervisor

The accounts payable supervisor reports to the assistant controller.

His role and responsibilities are:

- Employees in the accounts payable department should be cross-trained.
- Make certain that accounts payable are not paid ahead of schedule.
- Ascertain that any appropriate discounts are taken advantage of while making payments.
- Handle inquiries about supplier payment.
- Best practices should be implemented in order to boost efficiency levels.
- Accounts payable personnel to be overseen and managed.
- Cash requirements to be forecasted from accounts payable.

(Bragg 2010 13- 15.)

#### 2.4.10 Payroll Supervisor

The payroll supervisor reports to the assistant controller.

His role and responsibilities are:

- Time cards to be converted into payroll system entries.
- Create vacation and pay accruals for the periodic financials.
- Payroll clerical staff to be cross-trained.
- Best practices should be implemented in order to boost efficiency levels.
- Payroll clerical personnel should be managed.
- Keep track of how much vacation and sick time has been taken and how much is still available.
- Payroll should be processed in a timely manner.
- Process termination pay within the time frames that have been mandated.
- Pay adjustments to be updated in a timely manner.
- (Bragg 2010 13- 16.)

#### 2.4.11 General Ledger Accountant

The general ledger accountant reports to the assistant controller.

His role and responsibilities are:

- Consolidate the entries from the subsidiary organizations.
- Ensure that the monthly bank reconciliations are performed and submitted on time.
- Follow the closure timetable for the period's end in a timely manner.
- Maintain a standard checklist of period journal entries.
- All account balances should be backed up in detail on a regular basis.
- Maintain and Keep the chart of accounts up to date.

(Bragg 2010 13- 16.)

#### 2.4.12 Tax Accountant

The tax accountant reports to the assistant controller.

His role and responsibilities are:

- Provide guidance to management on the tax implications of corporate strategies.
- Ensure the completion of all mandatory tax reporting in a timely way.
- Organize audits by various taxing authorities and make sure they are coordinated.
- Coordinate the work of tax preparation that is outsourced.

- Create tax strategies to allow to delay in making tax payments.
- Systematize the gathering of tax information.
- Negotiate with taxing authorities over outstanding tax payments and issues.
- When tax rates change, make sure to update the company's sales tax database.

(Bragg 2010 13- 16.)

### **3. Research Methods**

The research methodology and findings of the primary research are presented in this chapter. The aim will be to explain how the research process was done. The Chapter will contain information about the research approach, research design, Data collection methods and instruments, data analysis methods and process, reliability, and relevance. With justification on choices made and why they are suitable to study the phenomenon. The chosen research methodologies are first explained, followed by a discussion of how they were applied to answer the IQ questions. In addition, the results are visually displayed using figures, with comments highlighting the most fascinating findings or those that contradict initial assumptions.

The objective of the research is to find out how organizations and businesses make a decision on which accounting software to use. The research question is put as 'How do businesses choose an accounting software and how do they justify its need?'

This thesis is a research-based thesis that conducts an empirical search as a research type. The research method selected for the thesis is Qualitative which is by definition a set of qualitatively oriented methodologies that can be used alone or in combination. The data collection method will consist of interviews.

#### **3.1 Research Design**

A qualitative research approach in the form of fully structured interviews was used to perform this study. The term qualitative methodology refers to research that provides descriptive data, such as people's own written or spoken words and observable behaviors, in the fullest meaning. Qualitative methodology, like quantitative methodology, is more than a collection of data-gathering tools, as Ray Rist (1977) pointed out. It's a way of perceiving the empirical world. (Taylor S., Bogdan R., DeVault M. 2015, 8). In other words, and in general, qualitative research is a means of examining people's experiences in depth utilizing a variety of research methodologies such as in-depth interviews, focus group discussions, observation, content analysis, visual approaches, and life histories or biographies. (Hennink M., Hutter I., Bailey A. 2020, 10-11.)

When doing qualitative research, researchers use a flexible study design (Marshall & Rossman, 2011). We begin our study with just fundamental formulations of our research questions.

Regardless of how we begin, we will not know exactly what to look for or what precise questions to ask until we have spent some time in a particular setting. Depending on what we learn about a

setting and how participants perceive their own experiences, we can make up to 30 judgments about what more data to gather based on what we have previously discovered. And Offcourse Qualitative researchers operate within Theoretical Frameworks. (Taylor, Bogdan, DeVault 2015, 8.)

Because it focuses on people's actual experiences, the qualitative method was the most appropriate for this research. The study does not depend on huge data collection and analysis, instead is based on information that can't be measured or counted but may be gathered and analyzed via observation. Also having the research full of how and why Questions is another sign why the Qualitative Method is the right research method to use.

As presented in Figure 3, the research design is made up of one qualitative phase. For the data collection method, fully structured interviews were chosen as instruments to collect the data needed. The interviews were targeted toward professionals in the finance and accounting department of several companies as respondents/data sources. Once required answers for the interview questions are collected, they will be analyzed using a qualitative approach.

According to the research design represented in figure 3, the study consists of a single qualitative phase. The data collection method of expert interview questions was used, and the collected answers were analyzed using a qualitative approach.

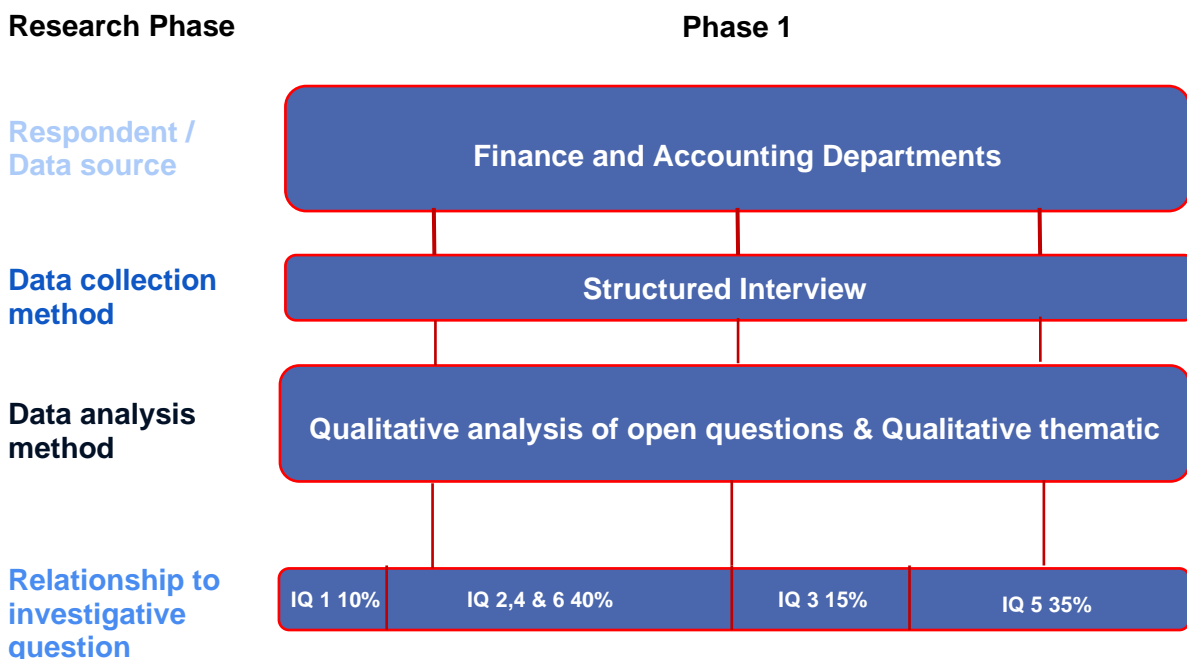


Figure 3: Research design

### 3.2 Design of Data Collection

In order to gather primary data for this study, a structured interview was undertaken. It is common to draw a distinction between structured, semistructured, and unstructured interviews. This distinction, on the other hand, should be viewed as a spectrum extending from relatively structured to relatively unstructured forms. I say "relatively" because, as Parker (2005) points out, there is no such thing as a completely structured interview "since individuals constantly say things that spill outside the structure, before the interview starts and after the recorder has been switched off" (p. 53). "Spilling beyond the framework" utterances are frequently crucial and, in some cases, the key to interpreting the interviewee's replies to the organized questions. (Patricia Leavy 2014, 285). A truly unstructured interview is likewise impossible since the interviewer always has a preconceived idea of what should take place throughout the discussion. Even if it is not possible or desirable to completely avoid structure, it is possible to design a framework that is flexible enough to allow interview subjects to express themselves and raise concerns and questions on their own terms and from their viewpoints. (Leavy 2014, 285.)

Interviews conducted in a semistructured approach are sometimes referred to as qualitative interviewing. They are also, by far, the most common type of interview in the humanities and social sciences, and they are frequently the sole format covered in qualitative research textbooks. By providing much more flexibility for the interviewer to follow up on whatever angles are deemed important by the interviewee, semistructured interviews have the potential to make better use of the knowledge-producing potentials of dialogues when compared to structured interviews. (Leavy 2014, 285-286.)

Table 2 includes the background questions for professionals. Background questions were asked at the outset of the interview to elicit further information about the subject's background. It was determined that open-ended questions were posed based on their background information

Table 2: Background check in Interview questions

Background Check	Interview Questions
------------------	---------------------

For Professionals	<ol style="list-style-type: none"> <li>1. What is your position in Accounting &amp; Finance department? And what are your main duties?</li> <li>2. How many years of experience do you have in the field of Finance &amp; accounting?</li> </ol>
About Company	<ol style="list-style-type: none"> <li>3. How many employees does the company have?</li> </ol>

Table 3 below illustrates investigative question one for professionals, as well as the relationship between it and the interview questions. The focus of this investigation question was the history of the software they have used and what they use the software for.

Table 3: Investigative question 1 is divided into interview questions.

Investigation Question	Interview Questions
IQ 1. What is the company's history with accounting software? And what are the tasks of accounting software?	<p>Which accounting software is in use right now?</p> <p>Has the company changed from using one software to another before? If yes, From which one to which one?</p> <p>What is the list of Accounting software that the company has used if there is more?</p> <p>What is the list of tasks that you expect to be achieved using the chosen accounting software?</p> <p>Is it only connected to the accounting department or is it coherent with other departments like sales..?</p> <p>What type of accounting software do you look at when choosing for your company?</p>

Table 4 below illustrates the real relationship between investigative question two and the interview questions that were asked. The interviewer posed these investigative questions as well as interview questions to experts over the course of the interview.

Table 4: Investigative question 2 divided into interview questions.

Investigation Question	Interview Questions
IQ 2. What is the structure of the accounting sector in a medium to large business?	<p data-bbox="810 331 1353 398">What is the structure of the Finance &amp; accounting department in your company?</p> <p data-bbox="810 432 1310 499">What are the positions available in the department?</p> <p data-bbox="810 533 1310 600">How many Staff Accountants does the company have?</p> <p data-bbox="810 633 1347 701">Can you explain the hierarchy in the department and the relationship between positions?</p>

The third investigative question developed for professionals is presented in table 5 below, which also includes its relationship to interview questions.

Table 5: Investigative question 3 divided into interview questions.

Investigation Question	Interview Questions
IQ 3. What job positions rely on the use of accounting software? Define them and their tasks	<p data-bbox="810 1122 1374 1223">How many members of the Accounting and Finance team use accounting software directly?</p> <p data-bbox="810 1256 1310 1323">Are the members who work directly on software all Staff Accountants?</p> <p data-bbox="810 1357 1422 1435">How are the accounting tasks distributed between accounting staff? What are the duties of each position?</p>

Table 6 below shows investigative question four which is developed for professionals, as well as its relationship to interview questions.

Table 6: Investigative question 4 divided into interview questions.

Investigation Question	Interview Questions
IQ 4. What is the process of choosing accounting software?	Is there a specific process that the company follows to choose or change the Accounting software you use or want to use?

	<p>Is responsibility for decision and process an individual or a team responsibility?</p> <p>Who is qualified to take such a decision or start working on the process of changing the system used?</p> <p>If Company decided now to choose a new system, What is the first step to start the process?</p> <p>What Is the timeframe to make such a decision?</p> <p>If there is a team involved in the process, who is involved, and what are their positions?</p> <p>If you would divide the whole process of choosing an accounting software into steps, What are these steps in chronological order?</p> <p>In other words, what are the events and their Timeline?</p>
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Table 7 below shows investigative question six which is developed for professionals, as well as its relationship to interview questions.

Table 7: Investigative question 6 divided into interview questions.

<b>Investigation Question</b>	<b>Interview Questions</b>
IQ 6. What factors to consider when choosing accounting software?	<p>What are the key points that are considered in the process of choosing new Accounting software?</p> <p>In other words what topics are carried on in the meetings/process of choosing the software?</p> <p>What General Functionalities of accounting software are considered the most?</p> <p>Any Industry Specific Funcunalties are sought?</p> <p>Do you prefer cloud or desktop-based accounting software? If desktop, How did the recent coronavirus affect the company activity in this area?</p>

	Is Scalability something that play role in your decision?
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### 3.3 Data Collection and saturation

Finding Suitable companies for the research was achieved by utilizing connections, from family, friends, employees, and business owners. Some companies were contacted by phone via author and since the companies are in Lebanon the author had to assign one of his connections to visit the physical location in Lebanon. A total of 12 companies were contacted, but from the list contacted 4 companies were able to be secured for a meeting. The interview questions were prepared and organized by the author. Interviews were conducted face to face by a personnel assigned and directed by the author. The personnel is a supervisor and a teacher with 17 years of experience, and holding a Certificate of English language development for cycle one and two. As the author was in Finland and the meeting took place in Lebanon. To make sure the data collection method is valuable and reliable and no data get lost, the interviewer did write down during the meeting the answers answered by the interviewees.

The author chose Lebanon due to the ability for him to utilize his connection back in his home country.

In Table eight below those who were contacted and the length of time spent in the interview are listed.

Table 8: Interview Process of Professionals

Company 1	Principal	Face to Face 50 Minutes	Transcribed
Company 2	Chief Financial Officer	Face to Face 45 Minutes	Transcribed
Company 3	Purchases Officer	Face to Face 30 Minutes	Transcribed
Company 4	Chief Financial Officer	Face to Face 40 Minutes	Transcribed

Data must be collected until saturation is attained in the qualitative process. The idea of saturation relates to the practice of gathering data until no new information can be gathered. There are no

methods, guidelines, or tests of adequacy available in qualitative research to estimate the sample size required to attain saturation that is comparable to those used in quantitative research. The researcher assesses the results' adequacy and comprehensiveness to identify the saturation signal.

### **3.4 Data Analysis**

Qualitative data is frequently subjective, rich, and contains in-depth information that is typically conveyed in the form of words. Reading a huge number of transcripts in search of similarities and differences, then identifying themes and developing categories are all part of qualitative data analysis. ( Fam 2008, 14.)

Framework analysis is an inherently comparative form of thematic analysis which employs an organized structure of inductively- and deductively-derived themes (i.e., a framework) to conduct cross-sectional analysis using a combination of data description and abstraction. ( Goldsmith, 2021).

When doing framework analysis, the main objective is to identify relevant patterns both inside and between cases or topics of interest and to explain and evaluate these patterns. This adaptable and productive method of data analysis has been used in practical research on a range of data kinds and a variety of ways in a variety of settings. The development of an analytic framework and the use of that framework are the two primary components of framework analysis. ( Goldsmith, 2021)

#### **Step 1: Familiarization**

In the process of Familiarization, the researcher went through the transcription multiple times.

#### **Step 2: Theme generation**

Theme generation can be witnessed in tables 10,11,12,13,14,15. Which was about going through each transcribed interview, making notes, and presenting what's needed and important.

#### **Step 3: a cross-sectional analysis using a combination of data description and abstraction**

#### **Step 4: Writing up**

The results section was written after all the above-mentioned processes.

## **4. Results**

This Chapter covers the findings of interviews that took place between the 1st of January and the 17th of May in the year 2022. The findings are organized into subchapters, and each subchapter is further subdivided depending on the investigative issues that were raised. Subchapter 4.1 discusses the Introductory question which introduces the interviewees and gets to know them. According to the overlay matrix from chapter 1, the remainder of the findings in subchapters 4.2.1 to 4.1.6 is presented in a way that guarantees that all the investigative questions are addressed using the information gathered from the interviews.

### **4.1 Introductory Questions**

At the beginning of the interview, interviewees were asked preliminary questions. The interviewees in the research were all professionals in their field of finance and accounting. The number of interviewees was 5 professionals.

All the Professionals interviewed were from Lebanon, and all of them had experience in the field of finance and accounting. The professionals did carry the titles of chief financial officer, controller, purchasing officer, and principal. The background check during the interview did include questions about their position, duties, and work experience in finance and accounting. Depending on the field of business of the companies, these high positions in the company carried more than one job title. As for the experience, 4 years of experience in the position was the lowest, and 17 years of experience was the highest. The principal of the college mentioned that his duties included management between education, students, training courses, and being on top of the accounting department, where all major financial decisions and reports have to go through and be reported to him.

The chief financial officer of a bakery chain was with the most amount of experience years, as an interviewee he mentioned that his duties included financial planning, budgeting, cost study, government, and taxes paperwork. also stated that he has an assistant with the knowledge required to help him finish all his duties.

As for a supermarket, which was the biggest business from the number of employees side of things. the employee interviewed had the position of purchasing officer. The interviewee's duties were to manage, source, and buy goods. Also, pricing was one of his duties.

### **4.2 Investigation Questions**

In this chapter, answers to the investigative part of the study will be provided. All answers in this chapter will be concluded from the interviews done.

#### 4.2.1 What is the company's history with accounting software?

Table 9: First Investigative question with four interviewed companies

	Company 1	Company 2	Company 3	Company 4
<b>IQ.1 What is the company's history with accounting software?</b>	Since the principal took his job 4 years ago the college hasn't changed the software in use.	Yes, the company has changed from using another accounting software, but it was from the same company, where the company created a newer version with a different name and a completely new set and improved set of features.	The company hasn't changed the current accounting software since the interviewee received his job position 7 years ago.	since the interviewee received his job 6 years ago the same software is still in use.

The aim of the first investigation question is to get to know if the Company has experienced or went through a change in the accounting software being used. The interview questions included information regarding the accounting software in use now and whether the company has changed the accounting in use in the past.

Three out of the four companies haven't changed the accounting software in use since the interviewee got his job at the company. The interviewee from company two was the only one who have went through a change of the software. Yet, it was expressed by the interviewee that the change was from the same accounting software company, but the software was with a whole set of new and updated features and needed to be reinstalled.

#### 4.2.2 What are the most important tasks the accounting software is used for?

Table 10: Second Investigative question with four interviewed companies

	Company 1	Company 2	Company 3	Company 4

<p>What is the list of tasks that you expect to be achieved using the chosen accounting software?</p>	<p>The principal expects the used software to be:  All in one package ERP  Easy to use  The different access levels for each employee.  President has access to all levels.  The ability to be able to build profiles for all students, that include all Financial and academic information about the student.. which makes it easy and simple to access.  Include all Financial functions.  Not only the financial side of the company but also the academic side, like grades, courses, programs, and schedules.  Human resources.</p>	<p>The list of tasks that are expected to be achieved are:  To connect the process of buying and selling.  All nessecery accounting functions to be included like:</p> <ul style="list-style-type: none"> <li>- Recording transactions</li> <li>- Expenses</li> <li>- Inventory</li> <li>- Making reports</li> <li>- Assets</li> <li>- Payroll</li> <li>- Production</li> </ul>	<p>The chosen software is expected to be Wholes tic and Fast.  Include a good inventory management system</p>	<ul style="list-style-type: none"> <li>- All accounting tasks</li> <li>- Hotel management software features like:</li> <li>- To include Hotel Specific features</li> <li>- Reception</li> <li>- Customer card"</li> <li>- Room status control</li> <li>- Room reservations and pricing</li> <li>- Ability to record arrival list</li> <li>- Cleaning services</li> <li>- Catering and kitchen</li> </ul>
<p>Is it only connected to the accounting department or is it coherent with other departments like sales..?</p>	<p>No, it is not only connected to the accounting department, there is a link between all departments where each has their access level, some of them are academic while others are financial and also Human resources.</p>	<p>--</p>	<p>Yes, it is an ERP solution.</p>	<p>It is a wholistic solution, ranging from reception to accounting department.</p>

The second investigative question is the subject of this subchapter.

The Four interviewed companies were in different industries. The industries did include, hotel, food industry, education, and Retail. In this Investigative question, it was starting to get clear that each

industry requires a unique and different set of features. According to a principle in company one, for software to be suitable for the college, it is expected to be an easy-to-use, all-in-one package, ERP solution, and include all financial management functions. It was also noted that the software is required for not only the financial side of the company but also the academic side, like grades, courses, programs, and schedules, and merge them by having the ability to be able to build profiles for all students, that include all Financial and academic information about the student, which makes it easy and simple to access. From the Hierarchy of things, it was mentioned that there is a need for different access level for each employee, with the principal having access to all levels.

The Chief Financial Officer of company two answered that the company expects the software to be an ERP solution. At first, the interviewee's answer was general, were he expected the software to mainly connecting the process of buying and selling and have all the financial management functions/features included. Then it was added that the software is also expected to record transactions, have a connected cashier system, record expenses, Inventory, and make reports, assets, and payroll. In addition, more focus was on the importance for them that the software should include production features that allow them to record all materials used to produce each item they sell, their price (as in cost of goods sold), and the ability to have them detailed.

The Purchasing officer from company three answer was brief and general, he stated that the chosen software is expected to be an ERP, Wholesale solution, and Fast. The one thing noted is that it is expected that the software includes a good inventory management system.

The Chief Financial officer of company four answered that he expects the software to include all financial management tasks. The interviewee mentioned that the software should also include Hotel management features that are tailored toward Hotel needs. The features include reception, customer card, room status control, room reservations, and pricing, the ability to record arrival list, cleaning services, catering, and kitchen. This meant that the software is required to be a wholistic solution, ranging from reception to accounting department, and can provide both hotel management features and accounting features.

#### 4.2.3 What is the structure of the accounting and finance department in SMEs?

Table 11: Third Investigative question with four interviewed companies

	Company 1	Company 2	Company 3	Company 4
What is the structure of the Finance &	The accounting department consists of the Chief financial	The Accounting and Finance department consists of the Chief Financial Officer,	The Accounting and Finance department consists of Chief Financial Officer,	The Accounting department consists of

accounting department in your company?	officer, controller, purchases officer, senior accountant, and clerical staff.	Assistant Finance Controller Departments manager (for different sections of the bakery), Manager for each section of the bakery, Purchases officer, Inventory Manager, Staff Accountant, and Cashiers.	Branch Manager, Purchases officer, Inventory Manager, Staff Accountant, Clerical staff, Cashiers, and manager.	two personnel, a chief financial officer and an accountant.
Can you explain the hierarchy in the department and the relationship between positions?	The Controller's direct relationship is with the principal (who is at the highest level and has access to their systems). Also, the controller acts as a link between the principal and accounting staff/ purchases officer, where it is his role to manage the accounting team and make sure everything is being done right, and reports bank all statements with the principal	Chief Financial Officer comes on Top of the accounting department. Assistant Finance Controller, having the role of assistant of CFO. Departments manager (for different sections of the bakery), The bakery is divided into 5 production sections. The department manager also reports back to Assistant Finance Controller and CFO. Manager for each section of the bakery. Duties are to follow up with production needs and coordinate with the inventory manager and purchases officer. Purchases officer, in direct relation with inventory manager. Inventory manager. In the end, comes the Staff Accountant, who is responsible for recording daily transactions and daily reports. Cashiers	<ul style="list-style-type: none"> <li>– Chief Financial Officer / Controller is on top of the department.</li> <li>– Branch manager/ Controller/ Accounting Manager. His responsibility is to manage the branch accounting team. Reports back to the Financial Officer.</li> <li>– Purchases manager officer. Responsible for purchases and pricing.</li> <li>– Inventory manager. Responsible for managing inventory and in direct contact with the purchasing officer.</li> <li>– Staff Accountant Cashiers manager</li> </ul>	The chief financial officer has an accountant managing with him the accounting of the Hotel and is also responsible for recording daily transactions and taking daily reports from the cashier.

At this point in the structure of the interview questions, once some understanding about what the company looks for in software. It was time to develop more understanding of the structure of the accounting and finance department in the company. In the third Investigative question in this sub-chapter, the structure and positions of and in the accounting department will be talked about while also explaining the hierarchy in the department and the relationship between the positions.

In company one, the interviewee answered that the accounting department of the company consists of a controller, purchases officer, senior accountant, and clerical staff. The clerical staff did consist of two bookkeepers. As for the hierarchy in the department and the relationship between positions the interviewee mentioned that the Controller's direct relationship is with the principal, who is at the highest level and has access to their systems. The controller in the company one acts as a link between the principal and clerical staff, the purchases officer, where it is his role to manage the accounting team and make sure everything is being done right, and reports back all statements to the principal.

In company two, it was noticeable that the accounting department was bigger and the tasks were different due to the difference in the industries. The interviewee answered that the accounting and finance department includes a Chief Financial Officer, Assistant Finance Controller, departments manager (for different sections of the bakery), manager for each section of the bakery, purchases officer, Inventory manager, clerical staff, and cashiers.

Also explained the hierarchy in the department and the relationship between positions by mentioning that the chief financial officer comes on top of the accounting department. Then comes Assistant Finance Controller, his responsibilities include reporting directly to Chief Financial Officer and assisting with the management of all accounting operations. From here the interviewee brought production to the accounting team. There is a Department manager for different sections of the bakery, the bakery is divided into 5 production sections and their duties are to follow up with production needs and coordinate with the inventory manager and purchases. Department managers report back to the assistant finance controller and chief financial officer. It was also mentioned that there is always connection and coordination between purchasing officer and inventory manager. In the end, comes the clerical staff, who are responsible for recording daily transactions and daily reports.

The purchases officer of company three answered that the accounting and finance department consists of a Chief Financial Officer / Controller, Branch manager, Purchases officer, Inventory Manager, Staff Accountant, Clerical staff, and Cashiers manager. The interviewee also explained that the hierarchy in the department and the relationship between positions is in a way were the Chief Financial Officer who is on top of the department, then comes the branch manager for each branch who is also an accounting manager. His responsibility is to manage the branch accounting team. Reports back to the Financial Officer. Bellow them is Purchasing officer and is responsible for purchases and pricing. The inventory manager is responsible for managing inventory and is in direct contact with the purchasing officer. In the end, comes staff accountants and clerical staff, who report to the chief financial officer and branch manager.

Company four had the smallest accounting and finance department out of the four companies. The interviewee answered that the Accounting department consists of two personnel, a Controller and an accountant. The financial management of the company is done by the chief financial officer, and an accountant manages with him the accounting of the Hotel, with the responsibilities of recording daily transactions and taking daily reports from the cashier.

To summarize, after receiving information about the accounting and finance department from the professionals interviewed. It was concluded that the two factors that caused the difference in the department's structures were company size and industry. It was noticed that industry plays a big factor in affecting the structure of accounting and finance department, were in the case of company two the production sector made the department structure more complicated.

#### 4.2.4 What job positions rely on the use of accounting software? Define them, their tasks, and their access level to the software.

Table 12: Fourth Investigative question with four interviewed companies

	Company 1	Company 2	Company 3	Company 4
How many members of the Accounting and Finance team use accounting software directly?	As the accounting team isn't that big, all members have direct access to the software with different access levels depending on their tasks	Chief Financial Officer, Assistant Finance Controller, Purchases officer, Inventory Manager, Staff Accountant, and Cashiers.	All the team members have work to be done on the software, with specific access to each one.	All the members and they consist of two personnel.
Are the members who work directly on software all Staff Accountants?	As the software is not only responsible for finance and accounting of the business there are members from other departments who have access to certain levels according to their tasks. And also In the accounting department, higher positions like the controller personnel have direct work on software.	Chief Financial Officer, Assistant Finance Controller, Purchases officer, Inventory manager.	No, although bookkeepers are on the software for the most time but they are not the only ones who work directly on the software as all accounting team have some access for their tasks. Also, HR does use the software.	No, The accounting software also includes hotel management features, so receptionists and cashiers also use it.

<p>How are the accounting tasks distributed between accounting staff? What are the duties of each position?</p>	<p>The controller acts as accounting manager also and holds the team together. The controller is responsible for financial statements, payroll, budgets, and tax compliance issues. The purchases officer is responsible for the college's needs from computers, LCDs, desks, courses, buses/transportation s, Air conditioners, printers, and in general all electrical devices needed. A junior accountant is responsible for assisting the controller in preparing financial reports while keeping them updated and following up with journal entries. Clerical staff is responsible for recording daily financial transactions.</p>	<p>Assistant Finance Controller has the role of assistant of the Chief Financial Officer. Their duties are:</p> <ul style="list-style-type: none"> <li>- Financial planning</li> <li>- Budgeting</li> <li>- Cost study</li> <li>- Government nt and taxes work</li> </ul> <p>High coordination level between Purchases officer and Inventory manager. In the end, comes the Staff Accountant, who is responsible for recording daily transactions and daily reports.</p>	<ul style="list-style-type: none"> <li>- Chief Financial Officer is on top of the department.</li> <li>- Branch manager. His responsibility is to manage the branch accounting team. Reports back to the Financial Officer.</li> <li>- Purchases manager officer. Responsible for purchases and pricing.</li> <li>- Inventory manager. Responsible for managing inventory and in direct contact with purchasing officer</li> <li>- Staff Accountants and bookkeepers, responsible for recording daily transactions.</li> </ul> <p>Cashiers manager</p>	<p>The chief financial officer is responsible for government paperwork and producing reports for the board members/owners of the Hotel. The CFO has an accountant managing with him the accounting of the Hotel and is also responsible for recording daily transactions and taking daily reports from the cashier.</p>
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In this subchapter, the fourth investigative question will be explained and focused on. In the researcher's opinion, knowing the users who rely on using the software directly, their tasks, and access level to the software is essential for understanding the choice of accounting software.

The interviewee from company one answered that all members of the accounting and finance department have direct access to the software with different access levels depending on their tasks. Continued by saying, as the software is not only responsible for finance and accounting of the business there are also members from other departments who have access to certain levels according to their tasks. Then Quoted by the interviewee, ' And also In accounting department higher positions like him and controller personnel have direct work on the software'.

When it came to the distribution of financial management tasks between staff and the duties of each position. The principal answered that the controller acts as the accounting manager who directs and holds the team together. The controller is responsible for financial statements, payroll, budgets, and tax compliance issues.

The purchases officer is responsible for the college's needs from computers, LCDs, desks, courses, buses/transportations, air conditioners, printers, and in general all electrical devices needed.

A junior accountant is responsible for assisting the controller in preparing financial reports while keeping them updated and following up with journal entries, and clerical staff is responsible for recording daily financial transactions.

The interviewee from company two answered in a way same as company one that all team has work to be done on the software, and that the members of the accounting and finance team use accounting software directly are the chief financial officer, assistant finance controller, purchases officer, inventory manager, staff accountant, and cashiers. The interviewee also mentioned that the assistant finance controller officer's duties are to assist the chief financial officer with any task including, financial planning, budgeting, government, and taxes work, and preparing and publishing timely monthly financial statements. As for the purchases officer and inventory manager, there is a high level of coordination. In the end, comes the clerical staff, who are responsible for recording daily transactions and daily reports.

The purchases officer of company three answered similar to company one and two that all the team members have work to be done on the software, with specific access to each one. Regarding whether members who work directly on software are all staff accountants or from another department, the interviewee mentioned that the users are not all from the accounting department, although bookkeepers are on the software for the most time on daily bases but they are not the only ones who work directly on the software as all accounting team have some access for his tasks, also human resources personnel do use the software.

The duties and distribution of accounting tasks between each position start with the chief financial officer who is on top of the department. The branch manager, his responsibility is to manage the branch accounting team and report back to the Financial Officer. Purchases manager officer and is responsible for purchases and pricing. Inventory manager and is responsible for managing inventory and in direct contact with the purchasing officer. In the end comes staff accountants and bookkeepers, responsible for recording daily transactions.

In company four, same as previous interviews the interviewee answered that all the members and they consist of two personnel use accounting software directly. Regarding whether all members who work directly on software are all Staff Accountants, the answer was a clear no, since the software also includes hotel management features, so receptionists and cashiers also use it. Accounting tasks were distributed in a way that the chief financial officer is responsible for government paperwork and producing reports for the board member. The chief financial officer also has an accountant managing with him the accounting of the Hotel, and is responsible for recording daily transactions and taking daily reports from the cashier, and helping help produce financial reports.

To summarize, in SMEs interviewed it was concluded from the answers of the interviewees that all accounting department staff have certain work to do on the software, yet it was specified that most companies prefer different access levels depending on the tasks assigned to do. Also, the hierarchy of the access level was noticed more in cases were ERP system with different features and sections was in use.

#### 4.2.5 What is the process of choosing accounting software?

Table 13: fifth Investigative question with four interviewed companies

	Company 1	Company 2	Company 3	Company 4
Is there a specific process that the company follows to choose or change the Accounting software you use or want to use?	Yes, there is a specific process.	To change the accounting software in use and choose a new one. The CFO and Assistant Finance Controller are the ones in charge of making the decision. The process includes involving all the managers of the different sections who use the software.	The Chief Financial Officer and the IT are the ones Responsible for changing and choosing new accounting software.	There is no specific process, and the accounting team is small. The chief financial officer is responsible for changing and choosing accounting software with the help of outsourced IT personnel.

<p>If you would divide the whole process of choosing an accounting software into steps, What are these steps in chronological order?</p>	<ul style="list-style-type: none"> <li>- Contacting and meeting with the main office.</li> <li>- The Second step is getting everyone involved.</li> <li>- Meetings between Principle, Controller/Accounting Manager, Head of IT, and Director/Accountable from the main office.</li> <li>- From there depending on how meetings go, the decision is made. But in the school's situation right now they like the software in place.</li> </ul>	<p>An example would be if any of the managers or officers have an issue raised, a meeting between managers, Officers, CFO, and Assistant Finance Controller would be held to discuss the matter. Followed by several meetings between the team till a solution is found for the raised issue or new software that meets their requirement and solves the problem is found. In the end, the decision is held between Chief Financial Officer and Assistant Finance Controller.</p>	<ul style="list-style-type: none"> <li>- The chief Financial Officer would have a meeting with IT.</li> <li>- Feedback would be collected from users and managers.</li> </ul>	<p>Based on the needs and if there are any issues with the software the chief financial officer would assess them. Have an IT specialist outsourced, and then if the change is needed a market search would be done. Or decision can be outsourced. But it was noted that such a situation hasn't happened with the chief financial officer. In the end, the decision needs to go through the board and be approved for the change to happen.</p>
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The fifth investigative question is the subject of this chapter, which is about the company's process of choosing accounting software. In this investigative question, it seemed that each company follows different processes and procedures, with some having a specific planned process and some not having a specific process that gets followed.

According to the principal of company one answered there is a specific process that the company follows to choose or change the accounting software they use or want to use and responsibility for the decision is based on team effort, with different responsibilities for each member. Also mentioned is that the principal is qualified and has the authority to take such a decision or start working on the process of changing the system, but it needs to be in coordination with the school's main office/branch, the IT department, and controller. The interviewee continued by saying that if the company decided now to choose a new system, the first step would be by contacting the main office. The positions involved in the process of choosing the new software are the principal, controller, head of it, and supervisor from the main office. After contacting and meeting with the main office, the second step is getting everyone involved. Which includes meetings between

Principle, Controller/Accounting Manager, Head of IT, and Director/Accountable from the main office. From there depending on how meetings go, the decision is made. But in the school's situation right now they like the software in place.

It was specified that there is no specific timeframe to make such a decision, it depends on the urgency of the situation. But it's done over several meetings to have the requirements met, and more likely if a change is going to happen, it is going to be in summer break time when the curriculum is over.

The interviewee of company two specified directly that in order to change the accounting software in use and choose a new one. The chief financial officer and assistant finance controller are the ones in charge of making the decision. The process includes involving all the managers of the different section who use the software. Making the process of choosing a new software is a team effort, but in the end, the decision is for the chief financial officer and assistant finance controller. The interviewee mentioned that depending on the scenario and the problem raised or the reason for the change, a meeting occurs between managers, officers, CFO, and assistant finance controller to solve the issue or discuss changing the software and its aspects. In addition purchases officer, inventory manager, and section managers are also involved.

When the interviewee of company two was asked about dividing the whole process of choosing an accounting software into steps in chronological order. He answered with an example that if any of the managers or officers have an issue raised, a meeting between managers, officers, CFO, and assistant finance controller would be held to discuss the matter. Followed by several meetings between the team till a solution is found for the raised issue or new software that meets their requirement and solves the problem that was found. In the end, the decision is held between the chief financial officer and assistant finance controller.

The interviewee of company three answered that the chief financial officer is the one qualified and responsible to decide on changing and choosing new accounting software with the help of the IT department. Continued by mentioning that it is a team responsibility, but the team responsible for the change and choice is small. Regarding the whole process of choosing accounting software, the interviewee mentioned that it would start with the chief financial officer having a meeting with IT, then have required feedback and data collected from users/staff and managers. Based on feedback and discussion research would be made to make decisions and find a solution.

The interviewee of company four answered that there is no specific process. As the accounting team is small, The chief financial officer is responsible for changing and choosing accounting software with the help of an outsourced IT personnel, thus making it an individual decision from

inside the company. The interviewee mentioned in another question that there is no team involved, it is individual by a chief financial officer, and outsourcing might be an option. Regarding dividing the whole process of choosing an accounting software into steps, the interviewee answered that based on the needs and if there are any issues with the software the chief financial officer would assess them, have an IT specialist outsourced, and then if the change is needed a market search would be done or a decision can be outsourced. But it was noted that such a situation hasn't happened with the chief financial officer. In the end, the decision needs to go through the board and be approved in order for the change to happen.

In a summary, according to the interviews, some of the companies had a process ready for choosing accounting software and some didn't, and this seemed to be related to the size of the company. For who had processes in place, did take into account what different positions in the department and users of the software and what their thoughts are.

#### 4.2.6 What factors to consider when choosing accounting software?

Table 14: sixth Investigative question with four interviewed companies

	Company 1	Company 2	Company 3	Company 4
What are the key points that are considered in the process of choosing new Accounting software?	<p>When choosing the software they mainly want the software cover:</p> <ul style="list-style-type: none"> <li>- Wholestic solution</li> <li>- The software to be fast, compatible with the hardware and does not lag, and has no bugs. Where the principal said 'They don't want the pages to take ages to open.</li> <li>- Simplee and not complicated.</li> <li>- Classified and categorized</li> </ul>	<ul style="list-style-type: none"> <li>- Wholestic, ERP solution</li> <li>- Fast and not slow</li> <li>- To connect the process of buying and selling.</li> <li>- All nessecery accounting functions to be included like: <ul style="list-style-type: none"> <li>- Recording transactions, Expenses, Inventory, Making reports, Assets, and Payroll.</li> <li>- Record The Production of different products.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Wholestic, ERP solution according to the requirement of their own business, so it would be compatible .</li> <li>- Fast and not slow</li> <li>- Customer service and reachability</li> </ul>	<p>The software Must:</p> <ul style="list-style-type: none"> <li>- Have Hotel Management Features</li> <li>- Accounting essential tasks</li> <li>- Low maintenance</li> <li>- Easy to use and simple</li> <li>- Ability to use Different Users.</li> <li>- Good Customer support</li> <li>- Price</li> </ul>

	<p>according to their needs.</p> <ul style="list-style-type: none"> <li>– Good customer service and reachability.</li> </ul>	<ul style="list-style-type: none"> <li>– Reporting</li> <li>– Link between cashier's system and accounting.</li> </ul>		
Any Industry Specific Funcunalties are sought?	<p>The used software must contain the categories needed by the school.</p> <p>By that, it was specified that it provides a wholistic solution and includes not only accounting and financial data but also academic data about students and courses.</p>		<p>The Focus was always on the Wholistic factor of the program.</p>	<ul style="list-style-type: none"> <li>– Hotel management software features like:</li> <li>– To include Hotel Specific features</li> <li>– Reception</li> <li>– Customer card</li> <li>– Room status control</li> <li>– Room reservations and pricing</li> <li>– Ability to record arrival list</li> <li>– Cleaning services</li> <li>– Catering and kitchen</li> </ul>

In this subchapter, the sixth investigative question is addressed which is about the factors that the company considers when choosing an accounting software selling points.

The interviewee of company one answered that when choosing the software, they mainly want the software to be a Wholistic solution, fast, compatible with hardware, does not lag and no bugs, simple and not complicated, Classified and categorized according to their needs, and the providing company to have good customer service and reachability. The interviewee focused on the need for an ERP system that provides a wholistic solution, and that the software must contain the categories/sections needed by the school and not only financial management features.

The chief financial officer of company two answered that key points that are considered in the process of choosing a new accounting software include being wholistic, ERP solution, fast and not slow, to connect the process of buying and selling, also features to provide a link between cashiers system and accounting and all nessecery accounting functions to be included including, recording transactions, expenses, inventory, making reports, assets, payroll, record the production of different products, reporting features. The interviewee focused especially on the need for production features in the software.

The interviewee of company three answered that the chosen software is required to be a wholistic, ERP solution according to the requirement of their own business, so it would be compatible, fast, and not slow, and the providing company to have good customer service and reachability.

Same as companies one, two, and three, the interviewee from company four mentioned the need for a wholistic solution and that the key points that are considered in the process of choosing new accounting software include it having hotel management features, financial management features, on easy and automated reporting, requires low maintenance, easy to use and simple, ability to create different access levels for users, having good customer support and with an understandable price.

The interviewee also mentioned and focused that the software should include hotel-specific features like reception, customer card, room status control, room reservations, and pricing, the ability to record arrival list, cleaning services, catering, and kitchen.

To summarize the sixth investigative question, all companies had a similarity by preferring a wholistic solution. While the noticeable difference was each company requires industry-related features. For example, company one needed academic-related features in the software, company two needed production features, company three focused on a good inventory management system, and company four needed hospitality and hotel management features. Other key points that most companies needed were being simple and easy to use, good customer service from a provider, having different access level for employees, and automated reporting.

## 5. Conclusion

The objective of the thesis was to perform an analysis of how businesses choose accounting software. The concluding chapter of this thesis outlines the key findings of this research as well as their reliability, validity, relevance, and recommendation for future research.

### 5.1 Key Findings

The key finding from the results started with that ERP and accounting solutions are one of the services that once a company starts using from a certain provider, it is not easy and simple to make the shift to another provider. In most cases, it requires a massive issue with the software to require a change and once the software is already providing solutions for essential tasks and needs of the company, it is an easy option to keep using the current software or at least keep postponing the change, even though it might be slow, complicated, and outdated.

As for the software itself, wholeness was one of the main requirements that companies wanted. Companies didn't want a solution where they will have to put bits and pieces together and use other services that might not be compatible, which can make their job more complicated.

The terms 'easy to use, simple, or not complicated', this is related to the fact that automation at its detailed level can make the experience of using the software much smoother than it used to be and the detailed level of automation itself is a new growing technology that is in its evolving stage. Also simple is related to the software being organized, by having the company needs in categories and classified manner, which was expressed by one of the interviewees.

All companies had some hierarchy in running the business, and this was also expressed in the choice of the software, where it was demanded that the software would have different access levels for different positions of employees.

Continuing on the topic of the software itself automated reporting was expressed in a way that it is a time and employee saving feature that helps organize the workflow in the organization and makes it more efficient.

In the table below, there is a set of features summarized and concluded to help understand based on what features companies choose for their software. The features in this table are features that were common among most interviewed companies.

Table 15: Features essential for companies

	Wholes tic	Access lev-els	Easy and simple	Good cus-tomer service	Automated reporting
Company 1					
Company 2					
Company 3					
Company 4					

Another side that affected the choice was the industry the company was in. As mentioned in the sixth investigative question, each company required industry-related features. With company one needing academic-related features in the software, company two needing production features, company three focused on a good inventory management system, and company four needing hospitality and hotel management features. Other key points that most companies needed were being simple and easy to use, good customer service from a provider, having different access level for employees, and automated reporting.

The table below represents the industry-specific features that each company interviewed required, and it aims to represent how needs might differ, with more details on industry-specific features mentioned in the sixth investigative question.

Table 16: industry-specific features

	Academic features	Production features	Inventory management system	Hospitality and hotel management features
Company 1				
Company 2				
Company 3				
Company 4				

As mentioned and concluded from the fifth investigative question, some of the companies have a process ready for choosing accounting software and some didn't, and this seemed to be related to the size of the company. For those who had processes in place, it did involve different positions in the department and users of the software and what their thoughts are.

## **5.2 Reliability, validity, and relevance**

The many measures done by the researcher to guarantee that the study is reliable, legitimate, and relevant are discussed in this chapter.

Aspects of research that are vital to consider include validity and reliability. It is critical to pay special attention to these two factors since they might mean the difference between good research and bad research.

Taking reliability and validity into mind, the questions were written by the author. The interviews were set up in the researcher's home country in Lebanon. The researcher made sure that when the interviews were done, the interviewer wrote down the answers given by the interviewee, so the information won't be lost. More than that, because the interviewees are accounting experts and have managerial positions, the information gathered is reliable and valid. The responses and answers provided by professionals are based on the facts and on decisions they are responsible to take based on their positions and their own experience.

## **5.3 Recommendation for Future Research**

Due to the fact that the researcher included companies from his own country since his connection is there. The opportunity to widen the research toward companies in other countries is something that can be done for future research.

On the other hand, from the companies' side of things, other companies' sizes can be targeted, like light entrepreneurs, corporates, and public companies. With much bigger companies and corporates, it would also make more sense to implement the topic of automation more in the research.

Another element that could help the research in the future is involving a big consulting or accounting firm in one of the interviews which could help extract data from their point of view.

## 5.4 Reflection on Learning

Although it wasn't an easy process, yet it has been an informative and intriguing experience for me to go through the thesis process.

Conducting this study provided me with a chance to learn more about a subject that I'm in the process of earning my first degree.

For me making research about 'How do companies choose an accounting software?' did include a massive amount of data that was essential and would help me build and choose my career as someone who is still graduating and have a long way to go in front of him.

The research process was exciting, big, and needed a lot of organization. One of the main things that I learned was scheduling and organizing my time, as taking such a big workload might be frustrating. As I started, I wanted to spend as much time as possible and get work done, but after a while, I did realize that it wasn't sustainable for the long run and there had to be a plan. As well as finding interviewees, one tip that helped is using your connections. don't mind others' reactions, and don't hesitate to ask.

Another thing I learned while conducting this research, though I won't say I was the best at it, was how to deal with stress and maintain patience. It was quite upsetting at one time to be unable to continue writing because it needed a great deal of devotion and hard work. Where some issues made me stop, and take a break but eventually I had to keep working on it.

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## **Appendices**

### **Appendix 1. Interview questions for professionals**

What is your position in Accounting & Finance department? And what are your main duties?

How many years of experience do you have in the field of Finance & accounting?

How many employees does the company have?

Which accounting software is in use right now?

Has the company changed from using one software to another before? If yes, From which one to which one?

What is the list of Accounting software that the company has used if there is more?

What is the list of tasks that you expect to be achieved using the chosen accounting software?

Is it only connected to the accounting department or is it coherent with other departments like sales..?

What type of accounting software do you look at when choosing for your company?

What is the structure of the Finance & accounting department in your company?

What are the positions available in the department?

How many Staff Accountants does the company have?

Can you explain the hierarchy in the department and the relationship between positions?

How many members of the Accounting and Finance team use accounting software directly?

Are the members who work directly on software all Staff Accountants?

How are the accounting tasks distributed between accounting staff? What are the duties of each position?

Is there a specific process that the company follows to choose or change the Accounting software you use or want to use?

Is responsibility for decision and process an individual or a team responsibility?

Who is qualified to take such a decision or start working on the process of changing the system used?

If Company decided now to choose a new system, What is the first step to start the process?

What Is the timeframe to make such a decision?

If there is a team involved in the process, who is involved, and what are their positions?

If you would divide the whole process of choosing an accounting software into steps, What are these steps in chronological order?

In other words, what are the events and their Timeline?

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