

**AN EMPIRICAL STUDY OF THE RELEVANT SKILLS,
KNOWLEDGE AND EDUCATION IN FORENSIC
ACCOUNTING, AND THE CURRENT STATUS OF RELATED
SERVICES IN THE SRI LANKAN CONTEXT**

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AUTHENCITY STATEMENT

I certify that the attached material is my original work. No other person's work or ideas have been used without acknowledgement. Except where I have clearly stated that I have used some of this material elsewhere, I have not presented it for examination / assessment in any other course or unit at this or any other institution.

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SUPERVISOR CONFIRMATION STATEMENT

I certify that the above statement made by the candidate is true and that this project is suitable for submission to the Department of Accounting, University of Sri Jayewardenepura for the purpose of evaluation.

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ABSTRACT

Background

Over many generations fraud has been in existence, but in past two decades, the world has witnessed many prominent financial scandals such as Enron, WorldCom and Satyam. Moreover, the 2016 Global Fraud Survey steered by the Association of Certified Fraud Examiners (ACFE) illustrates that the organizations established worldwide lose approximately about 05% of their annual revenue due to fraud. In this backdrop, Sri Lanka has secured the 95th position out of 176 countries in the 2016 - Corruption Perception Index (Transparency International Sri Lanka 2017), thus may indicate the growing need for forensic accounting services in the Sri Lankan context.

Purpose

Accordingly, there are three main research objectives dealt in this research, which are to examine the relevant skills and knowledge required to provide the forensic accounting services; to assess the status of forensic accounting education, in terms of course content, methods of delivery and methods of assessment and to examine the range, extent (in terms of revenue generation) and future demand of the forensic accounting services provided in Sri Lankan context.

Methods

In terms of the first and third objectives of the study, the target population for this study defined to include the Professional Accountants in Public Practice in Sri Lanka (supervisory level and above), where a total of 82 responses were secured. In terms of the second objective of the study, the target population defined to include the syllabuses of foreign universities and foreign professional institutions that are currently offering forensic accounting related courses and have their syllabuses available online, and a random sample of 37 syllabuses of forensic accounting related courses was selected. This sample includes 20 foreign universities and 2 foreign institutions.

In terms of analytical strategies, first, descriptive statistics regarding the variables will be presented to obtain an overall idea of the sample professional accountants in public practice. Then, in terms of achieving the first objective of the present study, the mean

rank method is used to identify the top highest and bottom lowest means for the answers provided. Furthermore, a one sample *t*-test is performed to assess whether the mean value is statistically significantly different from the neutral value '3'. In achieving the second objective, in terms of course content; methods of delivery; and method of assessment, content analysis followed by descriptive statistics and frequency analysis is performed to identify the three themes. Moreover, in achieving the final objective, frequency analysis will be performed to assess the range of services provided and ranking will be performed to assess the extent (in terms of revenue generation) of the same.

Results and Findings

In terms of findings, the fraud risk assessment, deductive analysis and diagnostic skills were the highest ranked skills, whereas, the least ranked skill was marketing; and, the highest ranked knowledge area was accounting, whereas, the least ranked knowledge area was professional responsibilities. The selected forensic accounting syllabuses have used topics such as, introduction to forensic accounting, fraud examination, fundamentals of fraud, corporate governance and ethics and, audit and assurance more frequently. Textbooks and articles, lectures, tutorials and e-learning techniques were observed as key methods of delivery; and examination, individual reports and essays, and dissertation were observed as most popular methods on assessments. Services such as, litigation support, valuation of damages and fraud examination, risk management in forensic accounting and technology services ranked at top five (in terms of revenue generated), coupled with increasing future demand for litigation support and expert witnessing, and, stable future demand for fraud examination. The findings of this study is expected to contribute to the existing literature and fill the gap, especially in relation to a developing country like Sri Lanka.

Key words:

Forensic accounting, Forensic accounting education, Forensic accounting services, Knowledge, Skills

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Chapter 1 Introduction

1.1 Background of the Study

The origin of the present day accounting could be traced back to the 15th century when Fra Luca Bartolomeo de Pacioli, an Italian mathematician penned the double entry system in his book ‘Summa de arithmetica’ (Caliyurt & Crowther 2006). As depicted in Association of Chartered Accountants in the United States (2002), the modern profession of accounting was emerged in Scotland and therefore should give the precedence. Further it states that origin of the Chartered Accountants was in Scotland (ACAUS 2002).

In subsequent decades, the accounting discipline evolved dramatically, adding new domains. According to American Institute of Certified Public Accountants (2012), many embraced several auditing methods due to the industrial revolution and the stemmed drastic growth of business activities. It further states that the accounting and auditing disciplines further expanded when the firms quest for more tools and techniques for fraud detection and financial accountability, while the wealth-owners relied on the published financial reports when such firms listed in the stock market (AICPA 2012).

The historical evidences of major crises like, the rise and fall of business conglomerates in the 1970s, hostile takeovers in the United States in the 1980s, the collapse of Japan’s bubble economy in the 1990s, the Southeast Asian crisis in 1998, the Internet bubble, and the global financial crisis started in 2007 to some extent can be traced back a misunderstanding or misapplication of value creation principles (Koller, Goedhart & Wessels 2010). The researcher’s observation is that the above crises could be linked to corporate fraud as well.

Over many generations fraud has been in subsistence. In past three to four decades, many prominent financial scandals like Enron, WorldCom, Satyam have witnessed. Many of the scandals became milestones with historical importance in our journey in combating fraud (Pearson & Singleton 2008).

Brooks and Labelle (2006) argues that the recent financial scandals have raised the awareness of various stakeholders that accountants should be alert to potential fraud and other economic disputes. Bhasin (2013, p. 12), the term 'fraud' essentially 'involves using deception to dishonestly make a personal gain for oneself and/or create a loss for another'. According to Bhasin (2013), most definitions of fraud are based on general themes irrespective of having various legal definitions of fraud from country to country. It further dictates most commonly seen examples of fraud such as, theft, corruption, conspiracy, embezzlement, money-laundering, bribery and extortion (Bhasin 2013).

Albrecht (2005) argued that fraud is rarely seen and the symptoms of fraud are usually observed, where such symptoms do not necessarily mean fraud is being undergone as it may be caused by mistakes. But the act might also be deliberate. According to the Association of Certified Fraud Examiners (ACFE 2010), there are three main categories of fraud that affect organizations: asset misappropriations, fraudulent financial statements, and corruption.

According to Rezaee (2005), financial statement fraud is a deliberate attempt by corporations to deceive or mislead users of published financial statements, especially investors and creditors, by preparing and disseminating materially misstated financial statements. Rezaee et al. (2016) pointed out that the focus on financial reporting fraud (FRF) redirected towards prevention and detection particularly during the period between 2007 and 2009, when the global financial crisis was in existence.

Policymakers, regulatory bodies, investment and business communities gave prominence to the existence and growth of FRF followed by corporate misconduct (Rezaee et al. 2016). Fraud remains a significant problem both in local and global context even after many efforts over investigations as there appears to be new forms of frauds are emerging day by day (Hendi 2013).

The common view of the varied stakeholders is that, a public practice accountant shall assume an active role in providing reasonable assurance not only in financial reporting, but also regarding responsible corporate governance, detecting and preventing fraudulent financial activities (Durtschi & Fullerton 2005, Rezaee & Burton 1997).

Rokosu (2015) argues that there is an expedition for auditors to enhance their skills with regard to fraud detection, prevention and control.

According to the study conducted by Okoye and Akenbor (2009), forensic accounting stemmed from the traditional accounting and finance disciplines given the recent financial scandals requiring more professionalism. It further states that the forensic accounting is not purely a new field whereas it has been in existence a long-time back in history though it was not separately designated as forensic accounting during that time (Okoye & Akenbor 2009, Grippo 2003, Crumbly 2001).

No written documents have been published until 1946 with regard to forensic accounting though it has been in existence for many decades and centuries. In 1946, Maurice E. Peloubet, a partner in a New York accounting firm first published an article titled as “Forensic Accounting: Its Place in Today’s Economy” (Okoye & Akenbor 2009, Akhidime & Uagbale-Ekatah 2014). Peloubet has stated that, ‘during the war both the public and industrial accountant have been and now engaged in the practice of forensic accounting’ (Akhidime & Uagbale-Ekatah 2014).

Forensic accounting is often equated with fraud examination or fraud auditing (DiGabriele & Huber 2015). However, as Crumbley (2009) points out, “forensic accounting is a challenging discipline that substantially interacts with auditing, economics, finance, information systems, and law”. Huber and DiGabriele (2014, p. 45) have given the most comprehensive definition of forensic accounting as:

[...] a multidisciplinary field that encompasses both a profession and an industry, where civil or criminal economic and financial claims, whether business or personal, are contested within established political structures, recognized and accepted social parameters, and well-defined legal jurisdictions, and informed by the theories, methods, and procedures from the fields of law, auditing, accounting, finance, economics, psychology, sociology, and criminology.

According to Hendi (2013), fraud related audit encompassed with differences in its definition. Further it states that the terms like “forensic audit”, “forensic accounting”, “fraud examination” and “financial forensics” are often used interchangeably (Hendi 2013). Three common areas of forensic accounting practices in Anglo-Saxon countries are litigation consulting, expert witnessing, and fraud examination (Rezaee et al. 2004).

According to Stone and Miller (2013), forensic accounting and fraud investigation is an area which is growing at a higher pace by its minimum in three spheres; (1) forensic accounting practice; (2) forensic accounting education and certification; (3) research and publication in forensic accounting.

The Treadway Commission (1987) and the Committee of Sponsoring Organizations (COSO 1992) report, which considered to be the consequences of the growing demand for fraud investigation, stress the significance of, and need for, competently educated and trained forensic accountants (Rezaee & Burton 1997). Forensic accounting is one of the fastest growing area of accounting today (Okoye & Akamobi 2009). The relevance of Forensic accounting has been of growing interest to various stakeholders that include the government, investors, practitioners and regulatory bodies (Akhidime & Uagbale-Ekatah 2014).

Forensic accounting education comprise of ‘forensic accounting’ and ‘education’. Forensic accounting was introduced and defined in section 2.2.1. Accordingly, Bernstein (1967) defines education as "a continuous reconstruction of experience in which there was a development of immature experience towards experience funded with the skills and habit of intelligence”.

As far as the researcher observes, only a limited number of research studies can be found in the global context with a forensic accounting perspective in a selected territory. Whereas, many studies are based on the general perception of the forensic accounting education and or services. Adding to the same, very few countries have been identified as forensic accounting as a separate field in accounting to be serviced and/or educated to name a few USA, Australia, China, Turkey, Nigeria and India (Huber 2014; Akkeren, Buckby & MacKenzie 2013; Rezaee et al. 2016)

Thus, in the global context there is a growing body of research, firstly in recognizing the forensic accounting services that firms provide and its extent (Akkeren, Buckby & MacKenzie 2013, Kranacher et al. 2008, Candilis 2009, DiGabriele 2010, Gottschalk 2011), secondly in identifying necessary skills, knowledge and expertise they entail (Okoye & Akamobi 2009, DiGabriele 2010, Carpenter et al. 2011) and what are the demand, benefits, obstacles, coverage and methods of delivery of forensic accounting

education in different countries and regions (Buckoff & Schrader 2000, Ramaswamy & Houston 2007, Heitger & Heitger 2008, McMullen & Sanchez 2010).

According to researcher's observation, there is limited number of studies have been conducted in local context with regard to the subject area of this research. As far as the researcher observes, this study is the pioneering research that has been carried out in Sri Lanka, which examines and assess the forensic accounting services, skills and education required, primarily using the positivist research approach.

The next section explains the problem statement of this study.

1.2 Problem Statement

As pointed out by Black (2010), financial statement fraud was a contributing factor to the recent financial crisis and it threatened the efficiency, liquidity and safety of both debt and capital markets. Bhasin (2013) states that, it has very significantly increased 'uncertainty' and 'volatility' in financial markets, shaking investor confidence worldwide. It also reduces the creditability of financial information that investors use in their investment decisions (Rezaee & Kedia 2012).

The 2016 Global Fraud Survey steered by the Association of Certified Fraud Examiners (ACFE) illustrates that the organizations established worldwide lose approximately about 05% of their annual revenue due to fraud. Multiplying the ACFE percentage of loss due to fraud by the gross domestic product of Sri Lanka would mean an annual cost of over US Dollars 4.07 billion (Sri Lankan Rupees 591.95 billion) in Sri Lanka alone. According to Transparency International Sri Lanka (2017), 95th position has been secured by Sri Lanka out of 176 countries in the 2016 - Corruption Perception Index.

Recent studies and surveys indicate that investors and management continue to have concerns about financial statement fraud as summarized in Table 1-1.

Table 1-1 Analysis of Fraud Surveys

| Reporting Authority | Main Findings |
|--|---|
| The ACFE “Report to the Nations on Occupational Fraud and Abuse” (2016) | <ul style="list-style-type: none"> • The Association of Certified Fraud Examiners’ (ACFE) found that financial statement fraud, while representing less than 10 percent of the cases of fraud in its report, was by far the most costly, with a median loss of \$ 975,000 per incident. • Survey participants estimated that the typical organization loses 5 percent of its revenues to fraud each year causing \$ 6.3 billion in total. • The median loss caused by the occupational fraud cases in our study was \$125,000. More than one-fifth of these cases caused losses of at least \$1 million or more. • The frauds reported to us lasted a median of 18 months before being detected. • Southern Asia had the largest percentage of reported corruption cases in our study, followed by the Middle East and North Africa. |
| The COSO Fraud Report (2010) | <ul style="list-style-type: none"> • The Committee of Sponsoring Organizations of the Treadway Commission analyzed 347 frauds investigated by the U.S. Securities and Exchange Commission (SEC) from 1998 to 2007 and found that the median dollar amount of each instance of fraud had increased three-times from the level in a similar 1999 study, from a median of \$4.1 million in the 1999 study to \$12 million. • In addition, the mediansize of the company involved in fraudulent financial reporting increased approximately six-fold, from \$16 million to \$93 million in total assets, and from \$13 million to \$72 million in revenues. |
| University of Portsmouth (U.K.), Annual | <ul style="list-style-type: none"> • The scale of fraud losses in 2016, against all victims in the U.K., is in the region of £193 billion per annum. In 2012 it was £73 billion. |

| | |
|--|--|
| Fraud Indicator (2016) | <ul style="list-style-type: none"> • The private and public sector fraud losses are estimates at £144 billion and £37.5 billion respectively. • Fraudsters are fast, inventive, adaptable and willing to quickly exploit new opportunities. |
| KPMG Sri Lanka “Fraud Survey Analysis 2011/2012” | <ul style="list-style-type: none"> • The study revealed that many companies admitted that there was fraud in the country and the industry, but refused to accept that fraud existed in their particular company. • This survey highlighted that 70 percent of the respondents admitted to having encountered fraud in their organizations within last two years. • It’s further revealed that 27 percent of the perpetrators are from top management, 46 percent are lower level managers and 27 percent are customers. |
| Ernst and Young “Fraud Survey” (2015) | <ul style="list-style-type: none"> • 8 percent of Sri Lankan employees believe they have a whistle-blowing hotline and 19 percent state their respective organizations would support whistle-blowers. |

Source: Author constructed based on literature survey

Management in form of stewardship, intensive competition and pressures from the top of the management to provide better results etc. have paved the way to corporate frauds (Cox & Weirich 2002, Albrecht et al. 2004). According to Seidman (1939), fraud detection is accidental in sometimes (Seidman 1939). Change of management, fluctuations in share prices, suspended listing, delisting, bankruptcy, legal charges and disruption etc. could be identify as the implications of the corporate fraud (Tiwari & Debnath 2017).

The specialised field of study, forensic accounting demanded as a result of growing corporate frauds. The USA pioneered the field of forensic accounting (Huber 2014). According to Akkeren, Buckby and MacKenzie (2013), there are a variety of definitions that try to describe the range of forensic services offered within accounting profession. Hundreds of studies have been published in forensic accounting journals over the past 15 years on various forensic accounting topics using a variety of research methods (DiGabriele & Huber 2014).

Its application in the corporate field was widely noticed in the late 1980s by the US Government, with increased litigation charges after the deregulation of the savings and loan industry, rising corporate frauds and white-collar crimes (Carter 1997, Carnes & Gierlasinski 2001). However, it should not be construed as mere fraud detection work (Kahan 2006). It is the socio-professional activities based on the techniques and skills of law, accounting, audit and assessment to handle and solve the problems of illegal encroachment, damages, value maintaining and value adding for legal purposes (Renzhou 2011).

It is argued that accounting academics should revise their course material to educate students more appropriately to the current environment (Caliyurt & Crowther 2006). A dedicated formal approach to forensic accounting education has derived from the escalating demand for the forensic accounting professionals (Seda & Kramer 2014, Matson 2016). According to Lee et al. (2015), creative ability of a student can be enlightened through forensic accounting education.

As Bhasin (2015) reported, the opportunities for the forensic accountants are growing at the rapid speed all around the globe. However according to Bhasin (2016) a similar situation is observed in most of the Asian countries, as well as, all developed, developing and emerging nations. It further states that, it is most unfortunate that forensic accounting is, by and large, an unexplored area (Bhasin 2016).

According to Thilakarathna (2010), Sri Lanka should establish and develop the forensic and investigative accounting services as soon as possible to reduce unexpected corporate failures. The following was picked from an article published on Lanka Business Online (05 May 2016).

President of CA Sri Lanka, Lasantha Wickremasinghe said that amidst increasing fraud and corruption, the institute has taken steps to ensure that public expectations are met with the launch of this specialised course. [...] Wickremasinghe also encouraged more chartered accountants to follow the certificate course, as it will educate them in an important and relevant area, which will not only enhance their professional standing, but will also bring them greater professional success, as they will be in continuous demand across both the public and private sectors, locally and overseas.

From time-to-time, corporations and regulatory bodies have tried to analyze and correct any existing defects, if any, in their reporting systems (Bhasin 2013). Consequently it

further states that, there should be alternative tools to detect the possibility of financial frauds and forensic accounting can be seen as one of such tools (Bhasin 2013). An understanding of effective fraud and forensic accounting techniques can assist forensic accountants in identifying illegal activity and discovering and preserving evidence (Bhasin 2007).

By considering the above facts, it is justifiable to conduct a research on the topic '*An Empirical Study of the Relevant Skills, Knowledge and Education in Forensic Accounting, And the Current Status of Related Services in the Sri Lankan Context*'.

Problem Statement

The problem statement of this research paper can be demarcated as,

“What skills and knowledge areas will be required to perform forensic accounting services; what is current status of forensic accounting education in different dimensions; and what are the range, extent and future demand of forensic accounting services offered in Sri Lankan context?”

The next section explains the research questions of this paper which have been derived from the above problem.

1.3 Research Questions

Referring to the problem statement stated above, following research questions could be derived pertaining to the forensic education and services in Sri Lankan context.

- I. What are the skills and knowledge areas required to provide the forensic accounting services?
- II. What is the current status of forensic accounting education, in terms of, course content, methods of delivery and methods of assessment?

- III. What are range, extent and future demand of the forensic accounting services provided in Sri Lankan context?

The next section defines the research objectives of this paper.

1.4 Research Objectives

Based on the above research questions, following Research Objectives can be established.

Therefore, the objectives of this study are;

- I. to examine the skills and knowledge areas required to provide the forensic accounting services;
- II. to assess the status of forensic accounting education, in terms of, course content, methods of delivery and methods of assessment;
- III. to examine the range, extent and future demand of the forensic accounting services provided in Sri Lankan context.

The theoretical and practical significance of this study has been elaborated in next section.

1.5 Significance of the Study

1.5.1. Theoretical Significance

In this study, it first reviews the existing literature in the area of forensic accounting since it is observed that comparatively there is dearth of studies specifically in forensic accounting education both in local and global context. Then it reports the results of the survey on the different aspects of forensic accounting education, such as; demand, benefits, obstacles, coverage and methods of delivery. Finally it takes the opinions of academicians and practitioners which will compare and contrast.

As far as the researcher observes, this study is the pioneering research that has been carried out in Sri Lanka, which examines and assess the forensic accounting services, skills and education required, primarily using the positivist research approach. Therefore, this can be identified as a research opportunity for further empirical studies. This study plans to contribute to the existing literature on **forensic accounting** and fill the gap, especially in relation to a developing country like Sri Lanka. This paper can provide the foundation for establishing new guidelines in forensic accounting research in Sri Lanka.

1.5.2. Practical Significance

As highlighted by Huber and DiGabriele (2015), forensic accounting research must do more than contribute to the literature. It further suggests that the purposes of forensic accounting research are to:

- I. Support forensic accountants
- II. Advance forensic accounting knowledge
- III. Strive to develop new methods and applications of technology to forensic accounting
- IV. Support all domains of forensic accounting
- V. Support all fields of forensic accounting
- VI. Enhance the skills and abilities of forensic accountants
- VII. Enhance the skills and abilities of academics teaching forensic accounting
- VIII. Encourage interdisciplinary research in related disciplines that influence forensic accounting (Huber & DiGabriele 2015, p. 42)

Accordingly this study focuses on both the supply and demand sides of forensic accounting service and education, and attempts to provide information that may be useful for universities considering offering a course in forensic accounting in light of most recent changes in the business environment and the accounting profession.

Forensic accounting practices in financial reporting environment can be of great relevance (Enofe, Izevbigie & Agbonlahor 2014). Major parties who would be benefited by this research study are the policy makers and the professional regulatory

bodies of the accounting profession. The insights from various academicians and practitioners, which are the findings of this study may provide useful inputs to academic accounting programmes that are considering integrating forensic accounting into their current curriculum.

Results should aid in setting the future direction and role of forensic accounting practices and education in Sri Lankan context. The design and methodology used in the study has been elaborated in the next section.

1.6 Methodology

This study is based on positivist paradigm where new knowledge could be discovered through objective measures. In order to achieve the research objectives identified in the section 1.4, primarily quantitative research methodology was used. Therefore the researcher will follow deductive approach when conducting this research.

Questionnaire is the main instrument used in this thesis and it is developed based on the first and third research objectives precisely on, skills and knowledge areas; and forensic accounting services. Content analysis was used in achieving the second objective of this study. The instrument is contained in Appendix 02.

IBM Statistical Package for Social Sciences (SPSS) version 23 was used to analyse the data gathered by the survey. Descriptive statistics were used to understand the demographic variables of the sample of this study. And descriptive and inferential statistics were used in analysis. Under this, one sample *t*-test, frequency analyses have been conducted.

Next section explains the scope of the study, which then describes the population, sample and research instrument used.

1.7 Scope of the Study

The researcher is expected to examine the skills and knowledge areas required to perform forensic accounting services; assess the current status of forensic accounting

education; and extent, range and future demand of forensic accounting services provided in Sri Lanka.

The first and third objectives of this study is limited to the Sri Lankan context and the sample of this study is 82 number of responses secured from professional accountants in public practice. The study sample in relation to second objective is 37 forensic accounting syllabuses in international context. The practical implications of conducting and application of the results of the study are explained in next section.

1.8 Limitations of the Study

The main limitation of this study is the dearth of studies on the research topic in the Sri Lankan context. Another limitation of the study was that the sample of the research was restricted only to the accounting academics and forensic accounting practitioners. Even though there are other categories of professionals involve with the forensic accounting education and services such as, attorneys, information technology professionals, and the researcher could consider only the accounting academics and forensic accounting practitioners.

This study is the pioneering research that has been carried out in Sri Lanka, which examines and assess the forensic accounting services, skills and education required, primarily using the positivist research approach, thus it is impracticable to cover the full scope at its first attempt. Thereby the study has a limited scope. Therefore, findings cannot be generalized to other professional categories because of the use of a restricted sample.

Since the research is carried out based on the Sri Lankan context, the findings may not be generalized to the global context as a whole. In other words, since this research is carried out on the perspective of a developing country, it won't be much useful for the users who wanted to get an idea of a developed country.

The structure of the chapter of this research paper is briefly outlined next.

1.9 Structure of the Chapters

Chapter 1 enlightens on the background of the study establishing an overview of the study. Problem statement, research questions and objectives showcase the contribution would make by performing this study as answering a prevailing problem in the current Sri Lankan corporate environment. Then this chapter identifies both the practical and theoretical significance of the study, together with the practical limitations of the study. A brief on how the study would be performed has been explained next.

Chapter 2 shows a comprehensive literature review. Prior studies conducted in forensic accounting education and services were analysed in this chapter. Further, the dearth in research studies on forensic accounting services, skills and education in Sri Lankan context is highlighted. Further, the gaps in previous studies are identified and existing models used in prior studies in global context have also been assessed.

Chapter 3, Methodology describes the nature and design of the paradigm of this study which is based on positivist approach. Afterwards, the size and nature of the population and the sample, and the selection of the sample is described. Since the questionnaire is the most commonly used instrument in prior studies, two slightly different questionnaires have been used in this study as the main source of data, which is primary in nature.

Chapter 4 Discussion and Analysis, describes how the collected data are evaluated and the findings would be discussed systematically. IBM Statistical Package for Social Sciences (SPSS) version 23 was used to analyse the data gathered by the survey. Mainly descriptive statistics and inferential statistics have been used in analysing and under inferential statistics; one sample t-test and frequency analyses have been conducted.

Chapter 5 concludes the study by evaluating the outcome. Considering the findings of this study, the researcher has achieved all the expected research objectives successfully. The findings of the study are compared with previous studies. The practical implications and the directions for future research are also discussed in the conclusion.

1.10 Chapter Summary

This chapter enlightened by the substance of this study. The background of the study is explained in detail with the identification of the problem statement. This has cleared the path to establish the research questions and objectives of the study. In addition, this chapter described the theoretical and practical significance of the application of the results of this study. Then, the methodology and scope applied and the limitations of the study were also explained. The structure of this research paper is briefly explained in the final section of this chapter.

Chapter 2 Literature Review

2.1 Introduction

This section reviews the previously conducted research papers, with the aim of identifying the gaps and loopholes of the subject area of the research.

This chapter consists of four main parts. Firstly, it introduces and defines the main concepts of the study, which are forensic accounting and forensic accounting services. Secondly, broader theories related to forensic accounting services, skills and knowledge will be explained. Next, this phenomenon is separately analysed with reference to empirical findings. In that case, research studies carried out to identify forensic accounting services, skills and knowledge required to perform such services and forensic accounting education will be broadly analysed. This includes the analysis and discussion of the application of the previously identified broad theories and models as well. Moreover, the gap in literature on forensic accounting services, skills and knowledge and education in Sri Lankan context would be discussed as a sub heading. Finally, the chapter is concluded by giving a chapter summary.

2.2 Definition of the Concepts

2.2.1. Forensic accounting

The field of forensic accounting is not a new concept, though it has grown in popularity in recent years as it is founded upon understanding the mind of the fraudster in order to understand why frauds are committed (Hecht & Redmond 2010). According to Rezaee et al. (2014), forensic accounting first appeared in the United States in the late 1870s and early 1880s due to stock fraud cases and scandals involving the securities market and the credit industry. “Forensic” means “suitable for use in a court of law,” and it is to that standard and potential outcome that forensic accountants generally have to work (Crumbley et al. 2005). Forensic accounting has come into limelight due to rapid increase in financial frauds (Bhasin 2016).

However, Thomhil (1995) stated that, forensic accounting is a relatively new concept, hence there has been no formal definition being accepted as the standard. However, he defined forensic as an accounting analysis to assist in legal matters, which will form the basis for discussion, debate and ultimately dispute resolution (Thomhil 1995).

The body of forensic accounting literature that has emerged since the 1990s has mirrored the changing scope of concerns about this topic (Davis, Farrell & Ogilby 2010). A number of articles focused on the increasing demand for accountants to conduct forensic accounting activities and on the broadening definition of forensic accounting away from a narrow fraud detection definition (Cohen, Crain & Sanders 1996, Baron 2006, Wells 2003, Rezaee Crumbley & Elmore 2004).

Whereas, Crumbley (2006) defined forensic accounting as the application of specialized knowledge and specific skill to stumble up on the evidence of economic transactions. As depicted by Ozkul and Pamukcu (2012), forensic accounting is the specialty area of the accountancy profession which describes engagements that result from actual or anticipated disputes or litigation. Similarly, forensic accounting is the tripartite practice of utilizing accounting, auditing and investigative skills to assist in legal matters (Enofe, Utomwen & Danjuma 2015).

Forensic accounting has witnessed a gradual entrance into mainstream contemporary accounting literature and has been defined both conceptually and operationally by a considerable number of scholars (Enofe, Utomwen & Danjuma 2015)

Bhasin (2016) argued that the definition of forensic accounting is changing in response to the growing needs of corporations. For example, Bolgna and Linquist (1995) defined forensic accounting as the application of financial skills and investigative mentality to unresolved issues, conducted within the context of the rules of evidence. However, in the views of Howard and Sheetz (2006) forensic accounting is simply the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert witness.

From an auditor's perspective, forensic accounting deals with the application of auditing methods, techniques or procedures to re-solve legal issues that require the

integration of investigative, accounting, and auditing skills (Arokiasamy & Cristal-Lee 2009, Ozkul & Pamukc 2012, Dhar & Sarkar 2010, Manning 2002, Zysman 2001). Such forensic evidence must meet standards required by courts of law and be presented in a manner that will be accepted by a court of jurisprudence (Peterson 2015).

From the perspective of a fraud examiner, forensic accounting is the application of investigative and analytical skills to resolve financial issues in a manner that meets standards required by courts of law (Hopwood et al. 2008).

Overall, forensic accounting investigation will involve the services of the informed auditor, attorney and fraud examiner (Peterson 2015). Forensic accounting also called investigative accounting or fraud audit is a merger of forensic science and accounting (Okoye & Gbegi 2013).

According to AICPA (2005), forensic accounting is the application of accounting principles, theories and discipline to facts or hypothesis at issues in a legal dispute and includes every branch of accounting knowledge. Mehta and Mathur (2007) perceive that forensic accounting involves a financial detective with an apprehensive mind, a financial bloodhound, someone with a “sixth sense” that enables reconstruction of past accounting transactions and an individual who looks beyond the numbers.

Bhasin (2007) identified that the objectives of forensic accounting include: evaluation of damages caused by an auditors negligence, fact finding to see whether an embezzlement has taken place, in what amount, and whether criminal proceedings are to be taken; collection of evidence in a criminal proceedings; and calculation of asset values in a divorce proceedings. It further argues that the primary direction of forensic accounting is explanatory analysis (cause and effect) of phenomenon including discovery of deception (if any) and its effects introduced into the accounting domain (Bhasin 2007).

In this manner, Ramaswamy (2007) sees forensic accounting as accounting analysis that can uncover possible fraud that is suitable for presentation in court; he maintained that such analysis will form the basis for discussion, debate and dispute resolution.

According to Damilola and Olofinsola (2007), forensic accounting is the application of criminalities methods and integration of the accounting investigative activities and law procedures to detect and investigate financial crimes and related economic misdeeds.

Rezaee et al. 2016 suggests that, forensic accountants normally serve as fraud investigators when there is an allegation of fraud and fraud investigators examine financial data and other evidence to detect and report fraudulent activities. The main difference in typical financial statement audit and fraud investigation is that in an audit sufficient and appropriate evidence is gathered to substantiate the reliability, completeness, transparency and accuracy of financial reports which then provides a reasonable assurance that financial statements are free from material misstatements, whether caused by errors or fraud, whereas fraud investigators' keen focus is to discover and deter fraud by searching for at least one event or transaction that could signal the possibility of fraud (Rezaee et al. 2016).

According to Okoye and Akenbor (2009), it has been established that one of the challenges facing the development of forensic accounting in developing economies, is the fact that most companies, educational institutions and individuals myopically believe that forensic accounting is not different from auditing, hence they give very little or no attention to it. Grippo and Ibex (2003), Mazni and Mohd (2008) and Carey (2008) revealed that forensic accounting is different from auditing and is as presented in the Table 2-1 below:

Table 2-1 Difference between traditional auditing and accounting & forensic accounting

| Traditional auditing and accounting | Forensic accounting |
|--|---|
| Traditional Audit and Accounting is Mandatory | Forensic Accounting is done in response to an event |
| Auditors should possess "professional skepticism". | Forensic accountants should possess "Investigative mentality" |
| Measures compliance with reporting standards | Deals with Financial investigation |

| | |
|---|--|
| Obtain reasonable assurance that financial statements are free of material misstatement | Findings used as evidence in court or to resolve disputes |
| An auditor basically focuses on material transactions. | A forensic accountant may focus more on seemingly immaterial transactions. |
| Audit is mainly concentrated on Financial statements and its related items | The coverage of forensic accounting is wider than audit dealing with both financial & non-financial issues |

Source: Enofe, Utomwen and Danjuma (2015, p. 40).

According to Zysman (2008), a forensic accountant is often retained to analyze, interpret, summarize and present complex financial and business related issues in a manner which is both understandable and properly supported. According to Ansari (2005), forensic accounting is frequently associated with the analytical investigation of civil or criminal actions, such as:

- White-collar crime (Fraud and Embezzlement)
- Insurance casualty claims
- Loss measurement
- Accounting malpractice, and
- General abuse of trust relationships.

In a nutshell, forensic accounting is the application of accounting and auditing skills to legal problems, both civil and criminal. It has metamorphosed from the stage of mere testifying in court, i.e. expert witnessing to a more investigative function (Okoye & Akenbor 2009). Forensic accounting can, therefore, be seen as an aspect of accounting that is suitable for legal review, offering the highest level of assurance and including the generally accounted connotation of having been arrived at in a scientific fashion (Apostolou, Hassell, & Webber 2000, Crumbley 2008).

Out of the definitions of Forensic Accounting discussed above, the definition of AICPA (2005), forensic accounting is the application of accounting principles, theories and discipline to facts or hypothesis at issues in a legal dispute and includes every branch of accounting knowledge, can be considered as the best definition.

An introduction and definition of the forensic accounting services is depicted next.

2.2.2. Forensic accounting services

Akkeren et al. (2013) states that there are a varied range of definitions with regard to the range of forensic services offered within accounting profession. Three common areas of forensic accounting practices in Anglo-Saxon countries are litigation consulting, expert witnessing, and fraud examination (Rezaee et al. 2004, Herbert et al. 2017, Akyel 2012, Rezaee et al. 2016).

However according to Bhasin 2007 and Okoye & Gbengi 2013, forensic accounting consists of two major components: litigation services that recognize the role of an accountant as an expert consultant and investigative services that use a forensic accountant's skills and may require possible courtroom testimony. This implies that the forensic accountant should be skilled not only in financial accounting, but also in internal control systems, the law, other institutional requirements, investigative proficiency and interpersonal skills (Bhasin 2017).

Internationally, the ACFE (2016) define it as the use of professional accounting skills in matters involving potential or actual civil or criminal litigation. According to AICPA's CFF Core Focus Wheel, specialty areas most appropriate for forensic accountants are;

- (a) Financial Statement misrepresentations
- (b) Economic damages calculations
- (c) Fraud prevention, detection and response
- (d) Valuation
- (e) Bankruptcy, insolvency and reorganization
- (f) Family law
- (g) Computer forensic analysis (AICPA 2010)

In a different viewpoint, Manning (2005) notes that the services of forensic accounting are utilized in areas such as accounting, antitrust, damages, analysis, valuation, and general consulting. Forensic accountants have also been used in divorces, bankruptcy,

insurance claims, personal injury claims, fraudulent claims, construction, royalty audits, and tracking terrorism by investigating financial records (Manning 2005). However, according to Covalleski (2003), there are three of top six accounting niche services fall within the forensic accounting area: business valuation, litigation support and forensic/fraud.

The Accounting Professional and Ethical Standards Board (APESB) of Australia, working with Forensic Accounting Special Interest Group (FASIG) of Australia and other interested parties, issued Accounting Professional & Ethical Standard (APES) 215 - Forensic Accounting Services, which defines forensic accounting services as meaning “expert witness services, lay witness services, consulting expert services and investigation services” (APESB 2015, pg.5).

In Canadian perspective, Canadian Institute of Chartered Accountants (CICA) recognises the range of services offered by their investigative and forensic accountants (IFA) are as follows:

1. Assessing financial issues for litigation purposes
2. Financial investigations and fraud detection
3. Fraud risk management
4. Compliance with legislation and external regulations
5. Insurance claims (Brooks & Labelle 2006)

According to Kahan, (2006), commonalities between the various definitions reside in the areas of fraud investigation, litigation services, and preparing court-ready evidence, all of which require a certain level of education, technology skills and/or expertise. Regardless of the preferred definition, it is clear that the field is complex and demands specialised expert knowledge (Kahan 2006). There have been differences in the definition of the fraud related audit. The terms “forensic audit”, “forensic accounting”, “fraud examination” and “financial forensics” to name a few are often used to describe processes that are similar in some cases but are different in others (Hendi 2013).

Moreover, it is evident that most of the previous studies have preferred litigation consulting, expert witnessing and investigative accounting as mainstream forensic accounting services which are described next.

Litigation consulting (Consulting Expert Services)

In addition to fraud, accounting firms offer a wide range of services that fall under the broad term of 'forensic accounting services' (Akkeren et al. 2013). These include 'reactive' services such as dispute resolution and litigation advice, through to 'proactive' services such as risk analysis advice, information technology governance and business analytics (DiGabriele 2010, Gottschalk 2011).

Many of these services involve a range of technology related activities such as eDiscovery, reporting, data mining and computer forensics (Akkeren et al. 2013). In addition to these services, Nunn et al. (2006) and Akyel (2012) list dispute advisory, litigation support, expert witness engagements and business valuations (in addition to investigating fraud), as common services offered.

Okoye and Akamobi (2009) opines that litigation services include both business litigation and dispute advisory. Inevitably, where disputes involving individuals, businesses, governmental and non-governmental bodies arise and where a grievance has occurred, a party will have been affected, suffering monetary or non-monetary loss (Okoye & Akamobi 2009).

The American Institute of Certified Practicing Accountants (AICPA) suggests that due to the complex nature of litigation and other services offered, forensic accountants need to use their knowledge, skills, abilities, experience, training and education to provide value in their litigation advice and support for legal actions to attorneys, judges and juries (AICPA 2010).

Expert Witness Services

Akeyl (2012) opined that need for expert witnessing generally emerges in issues requiring accounting expertise. Often forensic professionals can resolve litigation

problems before any expert trial testimony is required (Akkeren et al. 2013). However, they sometimes need to testify as an expert witness if the dispute escalates to a court hearing and the judges and juries do not have specialised knowledge to reach the conclusion without their testimony (Okoye & Akamobi 2009).

APES 215 addresses the legal and ethical obligations of forensic accounting expert witnesses, providing clear guidelines on rules of engagement (APESB 2015). It is evident that expert witnesses have a public responsibility to act ethically, protect the public's interests, and, as they can positively or negatively influence a case depending on their level of expertise, they need to be held responsible (Reinstein & Lander 2004).

Lay Witness and Investigative Services (Fraud examination)

Most firms require a thorough in-depth investigation in certain auditing risk areas (AICPA 2004) and a primary purpose of forensic investigation is the identification, explanation and communication of the information behind economic and reporting events.

Due to the nature of white-collar crime, fraudsters are often difficult to detect as events are often not uncovered until approximately 18 months to two years after they began (Gottschalk 2011). Further, Bookman (2008) suggests that occupational fraud is only one kind of white-collar crime, which may include embezzlement, stealing of commodities, tax evasion and manipulation of records. More recently, PriceWaterhouseCoopers (2011) suggest that 'cybercrime' will be a major concern for organisations over the next five years, which will require a greater level of computer expertise to mitigate the risk.

This study is backed by theoretical explanations and models for forensic accounting skills and knowledge required which is explained in next section.

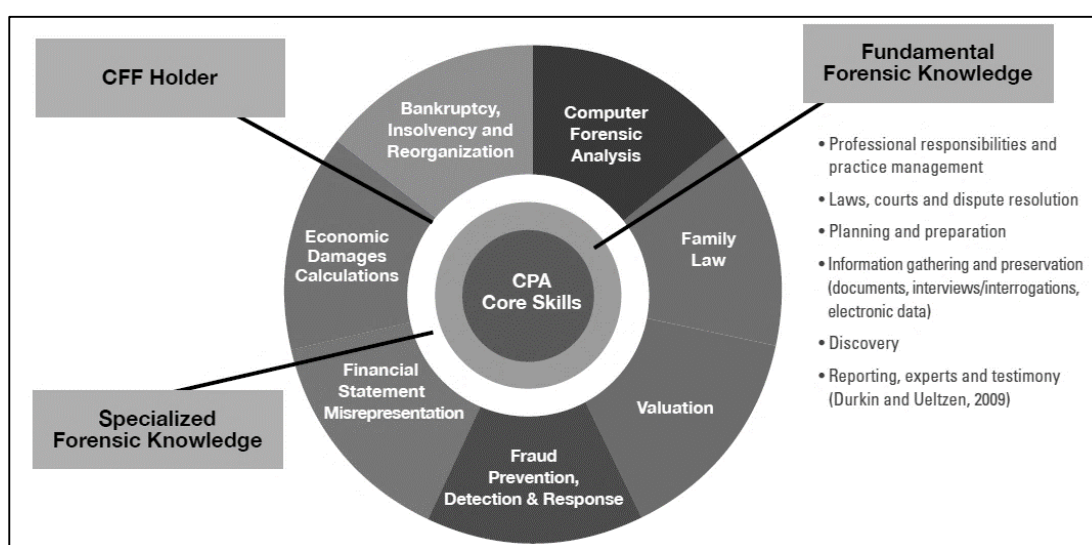
2.3 Broader theories and models

2.3.1. Skills, knowledge and expertise required to perform forensic accounting services

Skills

Figure 2-1 identifies the various specialisations and other analytical, investigative and communication skills required for a forensic accountant (Davis et al. 2010). This is an example of the forensic accounting services offered in the US, coupled with an outline of the knowledge base and formal certification required for the Certified Financial Forensic (CFF) credentials in the US forensic accounting industry.

Figure 2-1 Focus of the CFF (Certified in Financial Forensics)



Source: 'Characteristics and Skills of the Forensic Accountant' (Davis et al. 2010)

Akkeren et al. (2013) has explored the relevance of the model in their study which is in Australian perspective. DiGabriele (2008) identified the most important skills for forensic accountants as: deductive analysis, critical thinking, unstructured problem solving, investigative flexibility, analytical proficiency, and oral and written communications. According to Zysman (2008), a capable forensic accountant should have the following characteristics: curiosity; persistence; creativity; discretion; organization; confidence; and sound professional judgement.

However, Harris and Brown (2000) have identified specialized skills and technical abilities of forensic accountants. Forensic accountants are usually familiar with criminal and civil law and understand courtroom procedures and expectations. Those researchers also stressed investigative skills, including theories, methods, and patterns of fraud abuse (Harris and Brown 2000). Grippo and Ibex (2003) illustrated that the most important skills of forensic accountants come from experience in accounting and auditing, taxation, business operations, management, internal controls, interpersonal relationships, and communication.

However, Messmer (2004) stated that successful forensic accountants must have analytical abilities, strong written and verbal communication skills, a creative mindset, and business acumen. They must be able to interview and elicit information from potentially uncooperative people and possess a strong amount of skepticism. Ramaswamy (2005) believed that forensic accountants are distinctively positioned to be able to uncover financial deceptions, their prominent skills being an in-depth knowledge of financial statements, the ability to critically analyze them, and a thorough understanding of fraud schemes.

Knowledge

Using the same model depicted in Figure 2-1, AICPA suggests the fundamental forensic knowledge includes:

- (a) Professional responsibilities and practice management
- (b) Laws, courts and dispute resolution
- (c) Planning and preparation
- (d) Information gathering and preservation (documents, interviews/interrogations, electronic data)
- (e) Discovery
- (f) Reporting, experts and testimony (Davis et al. 2010)

As can be seen in Figure 2-1, foundational to the forensic accountant's fundamental forensic knowledge and specialized forensic knowledge are the 'CPA Core Skills'

((Davis et al. 2010). Accordingly a relationship between the skills and knowledge can be established.

In Canadian perspective, forensic accountants require a knowledge foundation that includes the areas noted below:

- (a) Governance and ethics
- (b) Investigative techniques and fraud schemes
- (c) Economic loss quantification and business valuation
- (d) Accounting, systems, audit, and taxation
- (e) Law, legal process, and rules of evidence

2.4 Empirical evidence

2.4.1. What are the skills and knowledge required to provide the above range of services?

Skills

The Australian study by Akkeren et al. (2013), has explored the relevance of the model explained in section 2.3.1. to Australian forensic accounting, comparing the qualifications, knowledge-base, skills and certifications of accountants in the US with the perceptions, experiences, knowledge-base and attributes of Australian practitioners. The same study has concluded on skills required for Australian practicing forensic professionals which is depicted in Table 2-3.

A similar study was conducted by Davis et al. (2009) titled "Characteristics and skills of the Forensic Accountant. The survey conducted, was aimed to improve the efficiency of forensic accounting, through the identification of the knowledge and skills that are necessary for this profession (Davis et al. 2009). The study included 126 attorneys, 603 certified public accountants, who primarily work as forensic accountants, and 50 academics, namely professors in the accounting and auditing department (Davis et al. 2009). All the three groups of respondents (attorneys, academics and public

accountants) highly ranked skills such as: simplifying the presentation of information, auditing and written communication skills.

The study by Digabriele (2008) has considered the results of the studies; Harris and Brown (2000), Grippo and Ibex (2003), Messmer (2004) and Ramaswamy (2005) and concluded on skills which are depicted in Table 2-3. This study has been based on a nationwide survey in the US on a random sample of 1,500 accounting academics, forensic accounting practitioners and users of forensic accounting services (Digabriele 2008). The skills rated as most important were critical thinking, deductive analysis and written communication, whereas the skills rated as least important were specific legal, composure and unstructured problem solving (Digabriele 2008).

A similar study was conducted by Okoye and Jugu (2010) in Nigerian context, which has been based on a survey in four States of the Federal Republic of Nigeria and FCT: Plateau, Anambra, Nasarawa, Bauchi and Abuja - on a random sample of 200 accounting academics, potential forensic accountants (where all external auditors have used in this category), and potential users of forensic accounting services flexibility (Okoye & Jugu 2010). The skills rated as most important were critical thinking, deductive analysis and written communication. In contrast to the US study by Digabriele (2008), composure has identified as a most important skill. The skills rated as least important were analytical proficiency, unstructured problem solving and investigative flexibility (Okoye & Jugu 2010).

A survey of three States in the National Capital Region (Delhi, Gurgaon and Ghaziabad) of India using a random sample of 120 practicing accountants, accounting academics, and users/potential users of forensic accounting services has been conducted in the study by Bhasin (2013). The skill competency items rated as the most important were effective written communication, auditing skills and oral communication. Research skills, tell the story, and investigative ability take the second position in terms of importance, whereas the items rated as least important were: understanding the goal of a case, solve unstructured problems, and synthesize results of discovery and analysis respectively (Bhasin 2013).

Arežina et al. (2014) has conducted the study based on a literature review where the purpose is to sublimate the experiences and opinions of various authors in order to determine which skills and traits are relevant to the profession of forensic accountant. Based on such literature review this study has identified the same skills tested in the studies by AICPA (2009) and Bhasin (2013).

Table 2-3 depicts the analysis of forensic accounting skills in different studies.

Table 2-2 Analysis of forensic accounting skills in different studies

| | Akkeren et al. (2013) | Davis et al. (2009) | Digabriele (2008) | Okoye and Jugu (2010) | AICPA (2009) | Bhasin (2013) | Arežina et al. (2014) |
|------------------------------|------------------------------|----------------------------|--------------------------|------------------------------|---------------------|----------------------|------------------------------|
| Investigative skills | | √ | √ | √ | √ | √ | √ |
| Communication | √ | √ | √ | √ | √ | √ | √ |
| Critical Thinking | √ | √ | √ | √ | √ | √ | √ |
| Deductive analysis | | | √ | √ | √ | √ | √ |
| Interpersonal skills | √ | | | | | | |
| Technical Accounting skills | √ | | | | | | |
| Auditing/Industry experience | √ | √ | | | √ | √ | √ |
| Diagnostic Skills | √ | | | | √ | √ | √ |
| Technology skills | √ | | | | | | |
| Conceptual Thinking | √ | | √ | √ | | | |
| Legal knowledge | √ | | | | √ | √ | √ |
| Interview/Investigations | √ | | | | | | |
| Commercial/business advisory | √ | | | | | | |
| Financial/Numeracy skills | √ | | | | | | |
| Ability to work in a team | √ | | | | | | |
| Time management | √ | | | | | | |

| | | | | | | |
|------------------------------------|---|---|---|---|---|---|
| Fraud Risk Assessment | √ | | | | | |
| Marketing | √ | | | | | |
| Unstructured problem solving | | √ | √ | √ | √ | √ |
| Analytical proficiency | | √ | √ | √ | √ | √ |
| Composure | | √ | √ | | | |
| Identify key issues | | | | √ | √ | √ |
| Organize an unstructured situation | | | | √ | √ | √ |
| Research Skills | | | | √ | √ | √ |
| Simplify the information | | | | √ | √ | √ |
| Solve structured problems | | | | √ | √ | √ |
| Think like the wrongdoer | | | | √ | √ | √ |
| Understand the goals of a case | | | | √ | √ | √ |
| Others: Psychology skills | | | | √ | √ | √ |
| Others: Sociology skills | | | | √ | √ | √ |

Source: Compiled by the Researcher

Knowledge

Tiwari and Debnath (2017) has presented the paper based on a literature review where the purpose is to develop an insight into the skill sets that forensic accounting practitioners need to possess to succeed in the practice of forensic accounting. Based on such literature review this study has reported that knowledge required for forensic accountant as Auditing, Accounting, Statistics, Information technology, Legal, Human-behaviour knowledge (Tiwari & Debnath 2017).

As explained above, following is the research question raised on skills required to perform forensic accounting services in Sri Lanka.

What are the skills, knowledge and expertise required to provide the above range of services?

2.4.2. What is the status of forensic accounting education, in terms of course content, method of delivery and method of assessment?

The education of a forensic accountant (FA) should cover the knowledge, skills, and abilities needed to effectively discharge the expected duties (Brooks & Labelle 2006). For the past 25 years, university accounting disciplines around the world have been revising their forensic accounting education and its curriculum to include courses in fraud/forensic accounting, yet an initial review of these courses indicates there are divergent approaches to their development (Smith & Crumbley 2009).

After accounting scandals such as, WorldCom, Microsoft, Peregrine Systems, Rite Aid, Sunbeam, Tyco, Waste Management, W.R. Grace, and Xerox, the public has started to criticise the quality of accountants' education given by business schools (Caliyurt & Crowther 2006). According to McPail (1999), business schools have not done an adequate job of preparing students to respond ethically to the complex issues that arise in the work environment. The study conducted by Albrecht and Sack (2000) concluded that accounting education had just not kept with changes in the business environment.

More recently, Seda and Kramer (2014) focused on the availability of forensic accounting education worldwide. Internationally, they found 447 colleges and universities offer a single forensic accounting course, 81 offer a forensic accounting certificate or degree program, and 106 offer a forensic accounting concentration or minor.

Rezaee et al. (2004) conducted a survey of both academicians and forensic accounting practitioners in the United States and find that both groups of respondents considered forensic accounting education as being relevant and useful to accounting students, and suggested forensic accounting topics should be integrated into the accounting curriculum. According to Wickramasinghe and Anthony (2017), many universities and several professional organizations are currently offering forensic accounting related courses and promoting fraud examination and forensic accounting education among the society.

Although forensic accounting is viewed as one of the most rewarding and secure career choices, there is still a gap between forensic accounting practice and education (Rezaee et al. 2014). A similar gap is identified in Sri Lankan context and forensic accounting viewed as one of the most secure career tracks, yet there are not accounting programs offering forensic accounting courses (Wickramasinghe & Anthony 2017). It further argues that there is no bi-furcated programme for forensic accounting from accounting and auditing curriculums of both academic and professional education (Wickramasinghe & Anthony 2017).

Course content

Following topics in forensic accounting were studied (Rezaee & Burton 1997, Brooks & Lebel 2006, Akyel 2012):

- | | |
|------------------------------|----------------------------------|
| 1. Fundamentals of fraud | 4. Cooking the books and |
| 2. Financial statement fraud | problems in accounting |
| 3. Types of fraud (e.g., | 5. Anti-fraud controls |
| employees, management) | 6. Elements of fraud: pressure, |
| | opportunity, and rationalization |

- | | |
|--|---|
| 7. Internal control evaluation | 25. Techniques in locating hidden assets |
| 8. Theory and methodology of fraud examination | 26. Legal elements of fraud |
| 9. Principles of ethics and corporate code of conduct | 27. Corporate governance |
| 10. Fraud detection and deterrence programs | 28. Conducting internal investigations |
| 11. Anti-fraud auditing standards | 29. Security and privacy |
| 12. Analytical review procedures | 30. Statistical sampling |
| 13. Anti-fraud criteria | 31. Careers in forensic accounting |
| 14. Environmental and business red flags | 32. Knowledge of the legal system |
| 15. Cyber and computer fraud | 33. Occupational fraud |
| 16. Anti-fraud training | 34. Bribery and corruption investigation |
| 17. Anti-fraud education | 35. Conflicts of interest investigating techniques |
| 18. Professional standards pertaining to forensic accounting | 36. Intellectual property fraud |
| 19. Manipulation of related-party transactions | 37. Compliance with applicable laws and regulations |
| 20. Effective report writing | 38. Interview skills and legal aspects of interviews |
| 21. Earnings management | 39. Crime control techniques |
| 22. Financial reporting process and analysis | 40. Shareholder litigation |
| 23. Criminology and white-collar and economic crimes | 41. Professional organizations sponsoring forensic accounting |
| 24. Financial reporting standards and principles | 42. Resolution of allegations of misconduct |

There were statistically significant differences in responses between academicians and CFE practitioners on 18 of the 26 topics. The most robust differences in rankings between CFE practitioners and academicians are on the following topics:

- (a) professional interview skills

- (b) legal aspects of interviews
- (c) professional standards on forensic accounting (Rezaee & Burton 1997).

This ranking of forensic accounting topics in terms of their importance to both academicians and CFE practitioners may assist accounting programmes in determining appropriate treatment of forensic accounting topics in the curricula (Rezaee & Burton 1997). Factor analysis was used by Rezaee and Burton (1997) to reduce the above forensic accounting topics into four modular topics as (1) Investigation and law, (2) Fraud and fraud auditing, (3) Financial reporting process and (4) Ethics.

However, the study conducted by Wickramasinghe and Anthony (2017) in Sri Lankan context, was based on content analysis on a sample of 14 foreign universities and 3 foreign professional institutions that are currently offering forensic accounting related courses and have their syllabuses available online. The study has concluded by identifying most important areas as follows:

- | | |
|--|--|
| 1. Introduction | 8. Employee fraud: the |
| 2. Indirect methods of reconstructing income | misappropriation of assets |
| 3. Proper evidence management litigation support in special situations | 9. Money laundering and transnational financial flows |
| 4. Business valuation | 10. Litigation services provided by accountants |
| 5. Detecting fraud in financial reporting | 11. Investigation of electronic data digital forensic analysis reporting |
| 6. Commercial damages | 12. Case studies |
| 7. Computing economic damages | |

Methods of delivery

Rezaee et al. (2004) opined that the most commonly used learning mechanisms in teaching a forensic accounting course are cases, textbooks, research projects, guest speakers, and videos, whereas cases and textbooks are represented the most important learning mechanisms in teaching a forensic accounting course (mean responses of 4.36

and 4.25 respectively). Research projects (mean response of 3.97) and guest speakers (mean response of 3.63) are also considered important teaching methods. Video presentation is viewed as a slightly important teaching technique (mean response of 3.32). Respondents did not consider field trips to professional organizations and correctional facilities as a popular way of teaching a forensic accounting course (Rezaee et al. 2004). The learning mechanisms aforementioned were arrived based on the review of a sample of 21 existing forensic accounting syllabi in United States (Rezaee et al. 2004).

Given the demand for forensic accounting education, at least two important questions may be posed: how to develop forensic accounting education; and how to integrate forensic accounting into accounting curricula. Rezaee and Burtin (1997) suggested that, in order to present forensic accounting principles and practices to their students, accounting faculty may wish to group interrelated topics in different curricular modules. It further explained that CFE practitioners required a separate forensic accounting course (62.9 per cent), whereas majority of academicians (68.3 per cent) preferred integrating forensic accounting topics into existing accounting and auditing courses (Rezaee & Burton 1997). However, both groups appear to believe that more forensic accounting education should be included in accounting curricula.

For example, Rezaee et al. (2004) found 25 respondents (16 percent) offered a separate forensic accounting course and 77 respondents (50 percent) integrated forensic accounting education throughout accounting and auditing courses. They found that practitioners had a much more expanded definition of forensic accounting rather than the narrower academic definition. A comparable study conducted at the same time by different researchers found similar results, identifying 13 universities (5 percent of respondents) that offered a forensic accounting course and 11 (4 percent) that had plans to offer such a course in the near future (Buckhoff & Schrader 2000).

Peterson and Reider (2001) identified 19 universities that offered a forensic accounting course and examined syllabi for specific content and learning activities, identifying similarities and differences. Based on this analysis, Peterson and Buckhoff (2004) described in detail the most comprehensive fraud examination course identified from this prior research, a course that had evolved and matured over several years, and was

taught by a Ph.D. who was also a practicing forensic accountant with several years of experience. Course enrollments, objectives, content, assignments, and grading were provided and discussed.

Zango (2012) indicates that 36.4 per cent of the respondents reported they do not cover any forensic accounting at all in their accounting program and only 16.2 per cent of the respondents have a separate forensic accounting course, with 5 percent indicating that forensic accounting is integrated through other accounting and auditing courses.

As explained above, following is the research question raised on forensic accounting education in Sri Lanka.

What is the status of forensic accounting education in Sri Lanka, in terms of demand, perceived benefits, obstacles, coverage and methods of delivery?

2.4.3. What are the forensic accounting services?

It is important to examine existing models and prior studies conducted on the subject matter in order to identify existing forensic accounting services and its extent which is one of the main objectives of this study. The majority of the research studies have identified litigation support, investigative accounting and expert witnessing as forensic accounting services which is evident in Table 2-2.

The focus of the study by Okoye and Akenbor (2009) is to examine the concept of forensic accounting 'in developing economies taking into consideration its problems and prospects, where the researchers have identified litigation support and investigative accounting as two broad areas of practice in forensic accounting.

The same mainstream forensic accounting services identified in section 2.2.2. has been tested in the context of the US by Rezaee et al. (2004) using a random sample of 2,000 accounting academicians and practicing CPAs. The accounting academicians include accounting professors, teaching primarily auditing and financial accounting selected from Hasselback's 2002 Accounting Faculty Directory. The practicing CPAs include

primarily partners and managers of public accounting firms in the US (Rezaee et al. 2004).

The majority of both groups of respondents reported that they believe the future demand for and interest in all three areas of forensic accounting will increase. However, differences in responses on the future demand for and interest in litigation support and expert witnessing between the two groups of respondents are statistically significant (.01 and .05 levels of significance respectively) in the sense that practitioners expect higher growth in these two areas of forensic accounting practices (litigation support, expert witnessing) than academicians (Rezaee et al. 2004). The majority of academicians (93.3 percent) and practitioners (88.2 percent) expect future demand for and interest in fraud examination to increase (Rezaee et al. 2004).

The study conducted by Rezaee et al. (2014) in China, has tested on the three mainstream forensic accounting services identified in section 2.2.2. A survey has conducted using 167 students from 2 disciplines of Financial Mathematics (155) and Applied Mathematics (12) in a University in China primarily because of their work experience in business, financial reporting knowledge, and familiarity with areas of forensic accounting practices (Rezaee et al. 2014). The majority of respondents reported that they expect future demand for and interest in fraud examination (48%), expert witnessing (57%) and litigation support services (67%) with the highest interest in litigation support (Rezaee et al. 2014). Comparison of these results with those of Rezaee et al. (2004) indicates that Chinese respondents felt that the demand for litigation support practice of forensic accounting is much higher than that in the United States.

A survey of three States in the National Capital Region (Delhi, Gurgaon and Ghaziabad) of India using a random sample of 120 practicing accountants, accounting academics, and users/potential users of forensic accounting services has been conducted in the study by Bhasin (2017). The majority of respondents reported that the demand for forensic accountants will increase well into the foreseeable future, where 94 per cent reported that the demand for forensic accountants would increase in the next 10 years (Bhasin 2017). Respondents were also asked on the sufficiency of forensic accountants to meet the demand in the next five, or ten years, and beyond the next 10 years, where,

many participants were unsure if the supply of forensic accountants would be enough to meet the demand in the future (Bhasin 2017).

The Accounting Professional and Ethical Standards Board (APESB) of Australia, working with Forensic Accounting Special Interest Group (FASIG) of Australia and other interested parties, issued Accounting Professional & Ethical Standard (APES) 215 - Forensic Accounting Services. APES 215 sets the standards for Members in the provision of quality and ethical Forensic Accounting Services in Australian context (APESB 2015).

Tiwari and Debnath (2017) has presented the paper based on a literature review where the purpose is to develop an insight into the skill sets that forensic accounting practitioners need to possess to succeed in the practice of forensic accounting. Based on such literature review this study has reported that in broader terms, forensic accountants render three kinds of services – consultancy, non-scientific testimony and investigative services (Tiwari & Debnath 2017).

In an Australian perspective, the study conducted by Akkeren et al. (2013) reported the findings from 32 interviews with Australian practicing forensic professionals who suggest that forensic accounting services are broad and complex. Nearly all respondents have identified that their firms provided fraud investigation (97%) and expert witness services (94%). A large percentage also identified Commercial Litigation and Dispute Advisory (91%), Valuation and Damages Assessment (84%) and Technology services (81%), Forensic Advisory services (75%) and Corporate Misconduct and Investigations (66%) as key service offerings. Accordingly Akkeren et al. (2013), has identified other forensic accounting services as follows (other than above three mainstream services):

- | | |
|-------------------------------|---------------------------|
| (a) Valuation/Damages | (g) Criminal Matters |
| (b) Technology services | (h) Business Advisory |
| (c) Risk Management | (i) Contract Assessment |
| (d) Corporate Misconduct | (j) Business Intelligence |
| (e) Business Analytics | (k) Personal Injury |
| (f) Regulatory Investigations | |

Table 2-2 depicts the analysis of forensic accounting services in different studies. Moreover, it is evident that most of the previous studies have preferred litigation consulting, expert witnessing and investigative accounting.

Table 2-3 Analysis of forensic accounting services in different studies

| | Okoye and Akenbor (2009) | DiGabriele (2009) | Tiwari and Debnath (2017) | Rezaee et al. (2004) US | APESB (2015), Akkeren et al. (2013) Australia | Rezaee et al. (2014) China | Bhasin (2017) |
|--------------------------|---|------------------------------|--------------------------------------|--|--|---|----------------------|
| Litigation support | √ | √ | √ | √ | √ | √ | √ |
| Investigative accounting | √ | √ | √ | √ | √ | √ | √ |
| Expert witnessing | | | √ | √ | √ | √ | |

Source: Compiled by the Researcher

As explained above, following is the first research question raised on forensic accounting services in Sri Lanka.

What are range and extent of the forensic accounting services provided in Sri Lankan context?

2.5 The Gap

There is dearth of studies which examined the range and extent of the forensic accounting services provided in Sri Lankan context, the skills and knowledge required to provide the above range of services and assessed the status of forensic accounting education in Sri Lanka, in terms of demand, benefits, obstacles, coverage and methods of delivery. This was identified as a main limitation of this study in section 1.8.

As far as the researcher observes, this study is the pioneering research that has been carried out in Sri Lanka, which examines and assess the forensic accounting services, skills, knowledge and education required, primarily using the positivist research approach. Therefore, this can be identified as a research opportunity for further empirical studies. This study plans to contribute to the existing literature on **forensic accounting** and fill the gap, especially in relation to a developing country like Sri Lanka.

2.6 Chapter Summary

This chapter reviewed and analysed the former researches in detail, on the concepts identified in the study. Firstly, forensic accounting and forensic accounting services were introduced by providing citations from prior researches and the best definition was identified at last. Not only the definitions but also the models used by other researchers were briefly explained with regard to the skills and knowledge required to perform identified forensic accounting services.

Then, the researcher engaged in a comprehensive analysis of the most relevant empirical studies performed in the subject area. This was broadly evaluated and related in terms of the three objectives of the study. Finally, chapter was concluded after engaging in a comparative analysis with the prior researches on the same subject matter and identifying the gap in the literature.

Chapter 3 Methodology

3.1 Introduction

This section elaborates the methodology used in this study. The chapter comprises of eight sub sections including the introduction and the chapter summary. First, it explains the research paradigm and approach and then the population and the sample of the study, in relation to the first and third objectives; and second objective respectively. Next is the conceptual diagram designed which depicts a clear picture of the interrelationship between the concepts intended to be used in this study. Then it will explain the sources used for data collection. Thereafter, under the section of ‘Instrumentation’, the construction of the questionnaire will be explained in detail. Questionnaire is the main instrument used to achieve the first and third research objectives of this study, whereas, content analysis is used in achieving the second research objective of this study. Furthermore this chapter describes how the data is collected. Finally, the chapter is concluded by giving a brief idea on the analytical strategies used in achieving the three research objectives of this study, which will be explained in detail under the Chapter 4.

3.2 Research Paradigm and Approach

3.2.1. First and Third Objectives

This research was based on positivist paradigm where new knowledge could be discovered through objective measures. In order to achieve the first and third research objectives, quantitative research methodology was used, where, the first and third research objectives of the study were *to assess the relevant skills and knowledge required to provide the forensic accounting services; and to assess the range, extent (in terms of revenue generation) and future demand of the forensic accounting services provided in Sri Lankan context.*

Burns and Grove (1993) define quantitative research as a formal, objective, systematic process to describe and test relationships and examine cause and effect interactions among variables. Surveys may be used for descriptive, explanatory and exploratory

research, whereas a descriptive survey design was used in this study. A survey is used to collect original data for describing a population too large to observe directly (Mouton 1996). A survey obtains information from a sample of people by means of self-report, that is, the people respond to a series of questions posed by the investigator (Polit & Hungler 1993). In this study the information was collected through self-administered questionnaires distributed personally to the subjects by the researcher.

A descriptive survey was selected because it provides an accurate portrayal or account of the characteristics, for example behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group (Burns & Grove 1993). Since the majority of literature found on similar research areas have used the quantitative approach (DiGabriele 2010, Gottschalk 2011, Rezaee & Burton 1997, Rezaee et al. 2004, Rezaee et al. 2016, Tiwari & Debnath 2017, Glusman 2007, D'aunno 2009), this research has also effectively used techniques such as descriptive statistics.

In this regard, the researcher followed deductive approach in order to achieve the expected research objectives. Epistemological assumptions of interpretive approach were used by reviewing empirical evidences through a precise literature review.

3.2.2. Second Objective

In order to achieve the second research objective, i.e. *to examine the status of forensic accounting education, in terms of content, methods of delivery and assessment methods*, content analysis will be used as the method of study.

Berelson (1952) define content analysis as an objective, systematic and quantitative description of the manifest (surface) content of communication. Content analysis can be both quantitative as well as qualitative. The quantitative content analysis deals with coverage or numbers of times an item appears in a piece of recorded information. This method will be used in achieving the second research objective if this study.

A similar study by Wickramasinghe and Anthony (2017) in Sri Lankan context, was based on content analysis on a sample of 14 foreign universities and 3 foreign

professional institutions that are currently offering forensic accounting related courses and have their syllabuses available online.

3.3 Population and Study Sample

3.3.1. First and Third Objectives

According to Burns and Grove (1993), a population is defined as all elements (individuals, objects and events) that meet the sample criteria for inclusion in a study. The target population for this study defined to include the Professional Accountants in Public Practice in Sri Lanka. According to the Institute of Chartered Accountants of Sri Lanka (n.d.), Public Practice Organizations are Firms of Practicing Chartered Accountants and the Auditor General's Department and Non-public Practice Organizations are all other approved training organisations, other than those classified as Public Practice. A professional accountant in public practice deemed to be recognized as a chartered accountant working in Public Practice Organizations.

Accordingly the Chartered Accountants of Sri Lanka, working in Public Practice Organizations are included in the population of this study, due to following reasons:

- (a) The Institute of Chartered Accountants of Sri Lanka (CASL) is the regulated professional organization in Sri Lanka, which was founded in 1959 by the Act of Parliament No. 23 of 1959, and considered as the authoritative body over the accounting standard setting process of Sri Lanka.
- (b) The researcher expects that these groups will be able to provide knowledgeable information that will be relevant in achieving the study objectives.

Therefore, the population of the study was 4,952 Chartered Accountants in Sri Lanka (Institute of Chartered Accountants of Sri Lanka 2017).

Mouton (1996) defines a sample as elements selected with the intention of finding out something about the total population from which they are taken. 90 subjects (Professional Accountants in Public Practice in Sri Lanka) were responded to the questionnaire, where only 82 responses were in usable condition, hence constitute the

sample of the study. Subjects who met the sample criteria were identified by the researcher as the Chartered Accountants of Sri Lanka and who is presently working in a Public Practice Organization of Sri Lanka. A sample in this study is, therefore, a smaller group of elements drawn through a definite procedure from an accessible population.

3.3.2. Second Objective

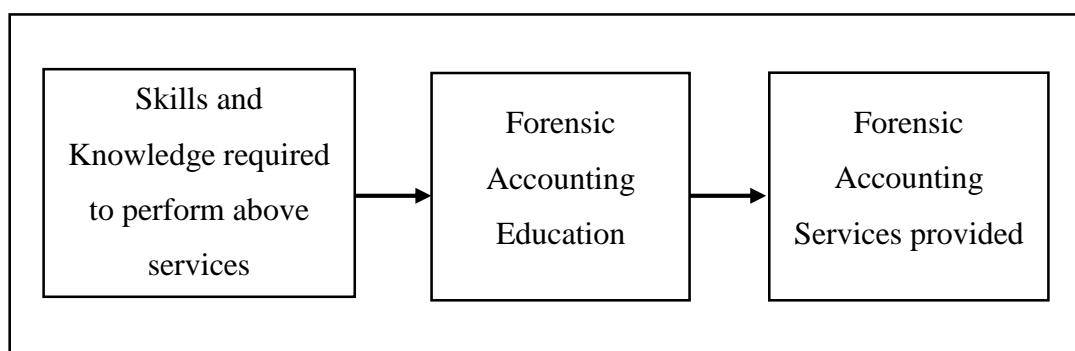
The target population for achieving the second research objective of this study defined to include the syllabuses of foreign universities and foreign professional institutions that are currently offering forensic accounting related courses and have their syllabuses available online.

A random sample of 37 syllabuses of forensic accounting related courses was selected. This sample includes 20 foreign universities and 2 foreign institutions. A list of the universities and institutions, from which the forensic accounting syllabuses were selected is annexed at the end of this thesis (Appendix 01).

3.4 Conceptual Diagram

Based on the literature review conducted in the Chapter 2, following Conceptual diagram was derived which shows the relationship among the concepts identified in the study.

Figure 3-1 Relationship between concepts of the Study



Source: Author constructed based on the literature review

3.5 Sources of Data

The main source of data collection considered in achieving first and third objectives of this study was self-administered structured questionnaire which were distributed among selected population. Accordingly, the research will be carried out using primary sources of data in relation to the first and third objectives of the study.

As per the first and third research objectives, to examine the skills, knowledge and expertise required to provide the forensic accounting services; and to examine the range, extent and future demand of the forensic accounting services provided in Sri Lankan context, views of the Professional Accountants in Public Practice in Sri Lanka were obtained through the self-administered structured questionnaire.

The main source of data collection considered achieving the second objective of this study, i.e. to examine the status of forensic accounting education, in terms of course content, methods of delivery and methods of assessment, is World Wide Web and mainly focused on secondary data sources.

3.6 Instrumentation

A Questionnaire (Appendix 02) designed by the researcher titled ‘An empirical study of the relevant skills, knowledge and education in forensic accounting, and the current status of related services in the Sri Lankan context’ was used as data collection instrument of this study, with the objective to elicit as much related information as possible from the respondents. Questionnaire was decided upon because of the following reasons:

- (a) To ensure a high response rate as the questionnaires were distributed to respondents to complete through www.esurve.com, which is the electronic form of questionnaire;
- (b) It requires less time and energy to administer;
- (c) It offers the possibility of anonymity because subjects’ names were not required on the completed questionnaires;
- (d) Less opportunity for bias as they were presented in a consistent manner.

3.6.1. Questionnaire Development

The question development process had taken several steps:

- (a) Overview of the research situation was taken into consideration it was important to satisfy the study objectives. The literature review done previously facilitated in the formulation of the questionnaire.
- (b) The completed questionnaire was then sent to the selected Professional Accountants who are already in Forensic Accounting Practice in Sri Lanka for the purpose of pre-testing and validity test from the experts. Their suggestions and comments would then be considered to perfect the questionnaire and filling in any loopholes.
- (c) Pilot study was followed suit. Twenty (20) Professional Accountants who were part of the study population was given the questionnaire, for them to fill up. Efforts would be taken to ensure as many as possible questionnaires sent was returned.
- (d) This finalized questionnaire was converted to an online version and responses were secured via www.esurve.org.

3.6.2. Questionnaire Design

Accordingly, with the research objectives and equipped with an extensive literature review, meetings and discussions with the experts were conducted prior to the conceptualization of the possible questionnaire items. This was important because Forensic Accounting is an emerging profession in the global landscape.

The questionnaire, 05 pages long, was divided into four (04) sections. It included Likert scale measurement, multiple-choice questions and one open-ended question. It was designed in such a way that only straightforward, concise, brief and short answers were required. Upon trial, the questionnaire could be answered within 10 - 15 minutes. The four (04) sections are as follows:

Section 01 was labelled as ‘Demographics’ and listed variables consisting of professional qualification possessed by the respondent, age, gender, highest academic

qualification, professional qualifications, present practicing organization category (i.e. Big three audit firms or Other audit firms), current designation, experience both in accounting and forensic accounting profession and awareness of forensic accounting services provided by the respondents' respective audit firms.

Section 02 was labeled 'Forensic Accounting Services' and listed two main questions focused on the third objective of the study (i.e. to examine the range, extent [in terms of revenue generation] and future demand of the forensic accounting services provided in Sri Lankan context). The respondent is required to select the services provided by their organization and rank the top five services based on the revenue generated by the firm. Next the respondent is required to select the option best matches with his/her opinion on the future demand of the main categories of Forensic Accounting Services.

Section 03 was labeled 'Skills and Knowledge to perform Forensic Accounting Services' and consisted of two (02) questions focused on the first objective of the study (i.e. to examine the skills and knowledge required to provide the previously identified range of services). Skills and knowledge aspects were separately questioned.

The both questions were structured in the modified Likert fashion, on a 5 – point scale, ranging from '*Least Important*' to '*Most Important*' and separately to mark '*Not Applicable*' skills and knowledge areas. Subjects were then instructed to respond on their perception on the level of importance with the skills and knowledge areas given.

Section 04 was labeled 'Opinion' asking the Professional Accountants of their personal opinion on forensic accounting practice in Sri Lanka.

After the questionnaire survey, the questionnaire data was entered into a specially designed data entry program. Data processing was done using IBM SPSS software Version 23 package.

3.6.3. Validation of the Questionnaire

The questionnaire designed for the study was subjected to a validation process for face and content validity. Face and content validity have been defined by McBurney (1994) as following:

- (a) **Face validity** is the idea that a test should appear superficially to test what it is supposed to test; and
- (b) **Content validity** is the notion that a test should sample the range of behaviour represented by the theoretical concept being tested.

Questions were based on information gathered during the literature review to ensure that they were representative of the generally accepted views on Forensic Accounting internationally. Content validity was further ensured by consistency in administering the questionnaires. All questionnaires were distributed to the respondents by the researcher via www.esurv.com. The questions were formulated in simple language for clarity and ease of understanding. Clear instructions were given to the subjects and the researcher completed the questionnaires for those subjects who could not read.

In the validation process of this study, copies of the questionnaire were given to some academicians and professional accountants. These experts went through the research questions and the questionnaire carefully to ascertain the appropriateness and adequacy of the instrument. They suggested structuring the questionnaire in the Likert fashion, on a five-point scale instead of modified 4 point Likert fashion and other useful observations and suggestions by the experts were modified, and the corrections were made.

3.6.4. Ethical Considerations

To render the study ethical, the rights to **self-determination**, **anonymity**, **confidentiality** and **informed consent** were observed. Written permission to conduct the research study was obtained from the Department of Accounting of University of Sri Jayewardenepura, Sri Lanka.

A cover letter accompanied the questionnaire explaining the purpose of the study and to act as a proof that the researcher was indeed a registered student doing research in this particular area, and was e-mailed. Burns and Grove (1993) define **informed consent** as the prospective subject's agreement to participate voluntarily in a study, which is reached after assimilation of essential information about the study. The respondents were informed of their rights to voluntarily consent or decline to participate, and to withdraw participation at any time without penalty. Respondents were informed about the purpose of the study, the procedures that would be used to collect the data, and assured that there were no potential risks or costs involved.

Anonymity and **confidentiality** were maintained throughout the study. Burns and Grove (1993:762) define anonymity as when respondents cannot be linked, even by the researcher, with his or her individual responses. In this study anonymity was ensured by not disclosing the name of the respondent on the questionnaire.

When respondents are promised **confidentiality** it means that the information they provide will not be publicly reported in a way which identifies them (Polit & Hungler 1995). In this study, confidentiality was maintained by keeping the collected data confidential and not revealing the respondents' identities when reporting or publishing the study. No identifying information was entered onto the questionnaires, and questionnaires were only numbered after data was collected.

The ethical principle of **self-determination** was also maintained. Subjects were treated as autonomous agents by informing them about the study and allowing them to voluntarily choose to participate or not. Lastly, information was provided about the researcher in the event of further questions or complaints.

3.7 Data Analysis Strategies

Data gathered from the questionnaires have been fed to the Statistical Package for Social Sciences (SPSS) 23.0. Mainly descriptive and inferential statistics have been used in analysing. Frequency tables were drawn and from these the data was presented in pie diagrams and bar graphs in Chapter 4. The open-ended questions were analysed

through quantitative content analysis by the researcher with the aim of quantifying emerging characteristics and concepts.

In terms of analytical strategies, first, descriptive statistics regarding the variables will be presented to obtain an overall idea of the sample professional accountants in public practice. Then, in terms of achieving the **first objective** of the present study (Chapter 1), i.e., assessing the relevant skills and knowledge required to provide the forensic accounting services, the mean rank method is used to identify the top highest and bottom lowest means for the answers provided. Furthermore, a one sample t-test is performed to assess whether the mean value is statistically significantly different from the neutral value '3'.

In achieving the **second objective**, i.e., examining the status of forensic accounting education, in terms of content, methods of delivery and assessment methods, descriptive statistics and frequency analysis is performed to identify the three themes.

Moreover, in achieving the **third objective**, i.e., assessing the range and extent of the forensic accounting services provided in Sri Lankan context, frequency analysis will be performed to assess the range of services provided and ranking will be performed to assess the extent of the same. Utilizing the above methodology, the analysis is performed, and the resulting descriptive statistics and other results are shown in the following Chapter.

3.8 Chapter summary

This Chapter gave an outlook of the methodology used in the study. Firstly, it explained the research approach, population and the sample used, in relation to the first and third objectives; and second objective respectively. Then, the conceptual diagram was drawn up to give an understanding of the interrelationship among the concepts used in this study. Then, this chapter explained the sources of data used for data collection. Furthermore, under section of the 'Instrumentation', the way in which the questionnaire was designed and developed was explained. The chapter thereafter described the way in which the data were collected, managed and analysed. Finally, the Chapter is concluded by briefing the summary.

Chapter 4 Analysis and Findings

4.1 Introduction

Firstly this chapter explains the demographic analysis of the sample. Secondly, the results of mean ranking and one sample *t*-test in relation to skills and knowledge required to provide the forensic accounting services were analysed. Next, the findings related to status of forensic accounting education, in terms of course content, methods of delivery and methods of assessment were analysed through quantitative content analysis. Then, results of frequency analysis with regard to the forensic accounting services provided in Sri Lankan context were analysed. Further, previously analysed findings were discussed comparing and contrasting with the previous studies. Finally the chapter is concluded by providing a brief summary of the results of the analyses performed.

4.2 Demographic analysis of the sample

4.2.1. Descriptive Statistics

This section describes the statistics that were resultant to the analysis performed using the data collected from the respondents to the questionnaire. The below table summarizes the demographic variables of the respondents:

Table 4-1 Demographic variables

| Demographics | Categories | N | % |
|--------------|--------------|-----------|------------|
| Age | 20 – 25 | 7 | 8.2 |
| | 26 – 30 | 17 | 20.7 |
| | 31 – 40 | 29 | 35.4 |
| | 41 – 50 | 19 | 23.2 |
| | Over 51 | 10 | 12.2 |
| | Total | 82 | 100 |
| Gender | Male | 60 | 73.2 |
| | Female | 22 | 26.8 |

| | Total | | 82 | 100 |
|---|-------------------------|-----------------------|------|-------|
| Highest academic qualification | GCE O/L | | 1 | 1.2 |
| | GCE A/L | | 10 | 12.2 |
| | Certificate/Diploma | | 6 | 7.3 |
| | Basic Degree | | 45 | 54.9 |
| | Postgraduate Diploma | | 6 | 7.3 |
| | MBA/M.Sc. | | 14 | 17.1 |
| | Ph.D. | | 0 | 0.0 |
| | Total | | 82 | 100 |
| Professional qualifications | Associate Member | ICASL | 67 | 81.7 |
| | | ACCA | 1 | 33.3 |
| | | CIMA | 13 | 81.3 |
| | Fellow Member | ICASL | 15 | 18.3 |
| | | ACCA | 2 | 66.7 |
| | | CIMA | 3 | 18.8 |
| | Total | | 82 | 100.0 |
| | Total | ACCA | 3 | 3.7 |
| | | CIMA | 16 | 19.5 |
| | Firm currently employed | Big three audit firms | | 32 |
| Other audit firms | | 50 | 61.0 | |
| Total | | 82 | 100 | |
| Current Designation | Partner | | 22 | 26.8 |
| | Director | | 11 | 13.4 |
| | Manager | | 32 | 39.0 |
| | Supervisor | | 17 | 20.7 |
| | Total | | 82 | 100 |
| Years of experience in the Accounting Profession | 1 – 5 years | | 26 | 31.7 |
| | 6 – 10 years | | 16 | 19.5 |
| | 11 – 15 years | | 12 | 14.6 |
| | More than 16 years | | 28 | 34.1 |
| | Total | | 82 | 100 |
| Years of experience in the Forensic Accounting Profession | No Experience | | 56 | 68.3 |
| | Less than 1 year | | 12 | 14.6 |

| | | |
|--------------------|-----------|------------|
| 1 – 5 years | 10 | 12.2 |
| 6 – 10 years | 2 | 2.4 |
| 11 – 15 years | 0 | 0.0 |
| More than 16 years | 2 | 2.4 |
| Total | 82 | 100 |

Source: Author constructed

It was noted, 8.2% of the respondents were aged from 20 to 25 and another 20.7% of the respondents were aged from 26 to 30, followed by the 31 – 40 age group representing 35.4% of the respondents. 23.2% of the respondents were aged from 41 – 50 and remaining 12.2% are from Over 51 age category. Further, it was observed that 73.2% of the respondents were males and 26.8% are females.

Considering the educational background of the respondents, 54.9% of the respondents had a basic academic degree as their highest academic qualification and the next highest academic qualification is a MBA/M.Sc., which represents 17.1% of the sample. Moving on to the professional qualifications, 100% of the respondents were qualified in Chartered Accountancy, out of which 81.7% of these individuals were Associate members and 18.3% were Fellow members. However, as an additional professional qualification 19.5% of the respondents were qualified in CIMA (UK).

39% of the respondents were represented from Big three audit firms (KPMG, EY or PWC) and 61% were currently employed in the other audit firms. Further, it was observed that 26.8% of the respondents were Audit Partners, 13.4% were Audit Directors, 39% were Audit Managers and 20.7% were Audit Supervisors.

31.7% of the respondents had 1 – 5 years of experience in Accounting profession, followed by 19.5% who had 6 to 10 years of experience, 14.6% had 11 to 15 years of experience while 34.1% had over 16 years of experience in the Accounting profession. 68.3% of the respondents had no experience in the Forensic Accounting profession, followed by 14.6% who had less than one year of experience, 12.2% had 1 to 5 years of experience while 2.4% had 6 to 10 years of experience and 2.4% had more than 16 years of experience in the Forensic Accounting profession.

The above discussion highlights that the sample is heterogeneous and it is having a diverse representation.

4.3 Skills and Knowledge areas required to provide the Forensic Accounting Services

4.3.1. Mean ranking and One sample *t*-test

In assessing the first objective of the study, i.e. assessing the relevant skills and knowledge required to provide the forensic accounting services, the below tables of descriptive statistics illustrates 28 skills and 15 knowledge areas that were included in the questionnaire in two separate questions which the respondents have marked to as either ‘not applicable’ or if applicable, the ‘most important skills and knowledge areas’ and the ‘least important skills and knowledge areas’. The mean values derived were interpreted based on the Likert scale used for the questionnaire, i.e. 1 – *Least Important* and 5 – *Most Important*.

Table 4-2 Mean ranking - Skills

| Skills | Indicated as ‘Not Applicable’ | N | Mean ^a | SD |
|---------------------------------|-------------------------------|----|-------------------|---------|
| Panel A - Most important | | | | |
| 1. Fraud Risk Assessment | | 82 | 4.5366** | .91887 |
| 2. Deductive analysis | | 82 | 4.5122** | .91953 |
| 3. Diagnostic | | 82 | 4.3049** | .88456 |
| 4. Composure | | 82 | 4.3049** | .78077 |
| 5. Unstructured problem solving | | 82 | 4.2683** | .77058 |
| 6. Sociological skills | 1 | 81 | 4.2346** | .79485 |
| 7. Psychological skills | 1 | 81 | 4.2222** | .89443 |
| 8. Conceptual Thinking | | 82 | 4.2073** | .85689 |
| 9. Investigative | 1 | 81 | 4.1852** | .93690 |
| 10. Financial/Numeracy | | 82 | 4.1829** | .86250 |
| 11. Auditing | | 82 | 4.1707** | .88617 |
| 12. Technical Accounting | | 82 | 4.1707** | .90000 |
| 13. Time management | | 82 | 4.0854** | .94544 |
| 14. Think like the wrongdoer | | 82 | 3.9512** | 1.57842 |
| 15. Simplify the information | 5 | 77 | 3.9221** | 1.20051 |

| | | | | |
|------------------------------------|----|----|----------|---------|
| 16. Critical Thinking | 3 | 79 | 3.8987** | 1.36433 |
| 17. Communication | | 82 | 3.8659** | 1.05130 |
| 18. Team working | | 82 | 3.8415** | 1.04786 |
| 19. Solve structured problems | 1 | 81 | 3.5802** | 1.16043 |
| 20. Commercial/business advisory | | 82 | 3.5244** | .70668 |
| 21. Legal | | 82 | 3.5000** | 1.15737 |
| 22. Understand the goals of a case | 1 | 81 | 3.3580** | 1.12148 |
| 23. Research Skills | 1 | 81 | 3.2222 | 1.20416 |
| 24. Information Technology | | 82 | 3.1707 | 1.28433 |
| 25. Identify key issues | | 82 | 3.1341 | 1.27427 |
| Panel B - Least important | | | | |
| 26. Analytical proficiency | | 81 | 2.8148 | 1.31445 |
| 27. Interviewing | | 82 | 2.6220* | 1.44564 |
| 28. Marketing | 22 | 60 | 2.1500** | 1.32544 |

^a Based on the one sample *t*-test performed, the significance of the difference between the test value of 3 and the mean values are also indicated, where ***p*<.01 and **p*<.05.

Source: Author constructed

The primary skill highlighted by the respondents is that fraud risk assessment which the respondents perceived is required to perform forensic accounting services in Sri Lankan context (mean value of 4.5366). The second most highlighted skill is deductive analysis (mean value of 4.5122), which is the ability to take aim at financial contradictions that do not fit in the normal pattern of an assignment.

Based on the responses received, the top ten skills perceived by the respondents are fraud risk assessment, deductive analysis, diagnostic, composure, unstructured problem solving, sociological skills, psychological skills, conceptual thinking, investigative, and financial/numeracy, which are also statistically significantly different with test value of 3 and their respective mean values.

It should be further highlighted that, respondents placed a lower level of importance of less than 3 to the skills such as ‘marketing’, ‘interviewing’ and ‘analytical proficiency’, out of which only marketing and interviewing skills are statistically significantly different with test value of 3 and their respective mean values.

Table 4-3 Mean ranking – Knowledge areas

| Knowledge areas | Indicated as 'Not Applicable' | N | Mean ^a | SD |
|---|-------------------------------|----|-------------------|---------|
| Panel A - Most important | | | | |
| 1. Accounting | | 82 | 4.4756** | .78921 |
| 2. Audit | | 82 | 4.4634** | .91887 |
| 3. Taxation | | 82 | 4.3293** | .88965 |
| 4. Business valuation | | 82 | 4.1220** | .99864 |
| 5. Fraud schemes | | 82 | 4.1098** | .96872 |
| 6. Reporting experts and testimony | 3 | 79 | 4.0380** | .97984 |
| 7. Economic loss quantification | | 82 | 4.0366** | 1.07088 |
| 8. Systems | | 82 | 4.0000** | .95581 |
| 9. Investigative techniques | | 82 | 3.9390** | .99812 |
| 10. Governance and ethics | | 82 | 3.7439** | 1.22536 |
| 11. Information gathering | | 82 | 3.3415* | 1.26900 |
| 12. Planning and preparation | 9 | 73 | 3.1233 | 1.30112 |
| 13. Laws, courts and dispute resolution | | 82 | 3.1220 | 1.27066 |
| 14. Discovery | 5 | 77 | 3.0000 | 1.45999 |
| Panel B - Least important | | | | |
| 15. Professional responsibilities | 6 | 76 | 2.6842 | 1.38766 |

^a Based on the one sample *t*-test performed, the significance of the difference between the test value of 3 and the mean values are also indicated, where ***p*<.01 and **p*<.05.

Source: Author constructed

The key knowledge area highlighted by the respondents is that, the knowledge of accounting which the respondents perceived is required to perform forensic accounting services in Sri Lankan context (mean value of 4.4756). Based on the responses received, the top ten knowledge areas perceived by the respondents are accounting, audit, taxation, business valuation, fraud schemes, reporting experts and testimony, economic loss quantification, systems, investigative techniques, and governance and ethics, which are also statistically significantly different with test value of 3 and their respective mean values.

It should be further highlighted that, respondents placed a lower level of importance of less than 3 to the knowledge of '*professional responsibilities*', which is not statistically significantly different with test value of 3 and their respective mean values.

4.4 Status of Forensic Accounting Education, in terms of Course content, Methods of delivery and Methods of assessment

4.4.1. Quantitative content analysis

In assessing the second objective of the study, i.e. examining the status of forensic accounting education, in terms of content, methods of delivery and method of assessment, the below tables of descriptive statistics illustrates the relative importance of the selected topics of forensic accounting within the collected 37 forensic accounting syllabuses, which constitutes 20 foreign universities and 2 foreign institutes in global context.

Table 4-4 Forensic Accounting Education – Course content

| Selected topics in Forensic Accounting | <i>N</i> | % |
|--|-----------------|----------|
| 1. Introduction to Forensic Accounting | 37 | 100.0 |
| 2. Fraud Examination | 32 | 86.5 |
| 3. Fundamentals of Fraud | 32 | 86.5 |
| 4. Corporate Governance and Ethics | 32 | 86.5 |
| 5. Audit and Assurance | 30 | 81.1 |
| 6. Fraud Risk Assessment | 29 | 78.4 |
| 7. Investigative Procedures | 28 | 75.7 |
| 8. Financial Accounting | 27 | 73.0 |
| 9. Legal System | 27 | 73.0 |
| 10. Financial Reporting Process and Analysis | 27 | 73.0 |
| 11. Research in Forensic Accounting | 26 | 70.3 |
| 12. Business Analytics and Modelling | 21 | 56.8 |
| 13. Financial Reporting Standards and Principles | 19 | 51.4 |
| 14. Economics | 18 | 48.6 |

| | | |
|--|----|------|
| 15. Business Valuation, Bankruptcy and Insolvency | 17 | 45.9 |
| 16. Real Life Case Studies | 16 | 43.2 |
| 17. Electronic and Cyber Crimes | 14 | 37.8 |
| 18. Taxation | 12 | 32.4 |
| 19. Effective Report Writing | 12 | 32.4 |
| 20. Management Accounting | 10 | 27.0 |
| 21. Interviewing Financially Sophisticated Witnesses | 8 | 21.6 |
| 22. Contemporary Issues | 4 | 10.8 |
| 23. Business Intelligence | 3 | 8.1 |
| 24. Forensic Accounting in Public Sector | 2 | 5.4 |
| 25. Intellectual Property | 1 | 2.7 |
| 26. Special Topics in Forensic Accounting | 1 | 2.7 |

Source: Author constructed

It is observed that, the top ten topics related to forensic accounting, incorporated in selected forensic accounting syllabuses are introduction to forensic accounting (100%), fraud examination (86.5%), fundamentals of fraud (86.5%), corporate governance and ethics (86.5%), audit and assurance (81.1%), fraud risk assessment (78.4%), investigative procedures (75.7%), financial accounting (73%), legal system (73%), and financial reporting process and analysis (73%).

However, ‘*special topics in forensic accounting*’ (2.7%), ‘*intellectual property*’ (2.7%), ‘*forensic accounting in public sector*’ (5.4%), ‘*business intelligence*’ (8.1%) and ‘*contemporary issues*’ (10.8%) are least frequently incorporated in forensic accounting syllabuses.

Table 4-5 Forensic Accounting Education – Methods of Delivery

| Methods of Delivery | N | % |
|--------------------------|----|-------|
| 1. Textbook and Articles | 37 | 100.0 |
| 2. Lectures | 36 | 97.3 |
| 3. Tutorials | 27 | 73.0 |
| 4. e-Learning Techniques | 25 | 67.6 |
| 5. Pre-Recorded Videos | 17 | 45.9 |

| | | |
|---------------------------------|----|------|
| 6. Case Studies in Teaching | 15 | 40.5 |
| 7. Discussion Groups | 15 | 40.5 |
| 8. Workshops | 11 | 29.7 |
| 9. Group Work Tasks in Teaching | 10 | 27.0 |
| 10. Projects in Teaching | 9 | 24.3 |
| 11. Seminars | 7 | 18.9 |
| 12. Q & A Sessions in Teaching | 3 | 8.1 |

Source: Author constructed

Results presented in Table 4-5 represents descriptive statistics of the learning mechanisms used in teaching a forensic accounting course using quantitative content analysis of selected 37 forensic accounting syllabuses. The key methods of delivery are textbooks and articles (100%), lectures (97.3%), tutorials (73%), e-learning techniques (67.6%), pre-recorded videos (45.9%), case studies in teaching (40.5%) and discussion groups (40.5%).

It is further observed that, 54.1% of the selected syllabuses are conducted online, which is categorized as distance learning courses and no face-to-face interaction is not available, and remaining 45.9% of the selected syllabuses are conducted on campus, where face-to-face interaction is available (not tabulated).

Table 4-6 Forensic Accounting Education – Methods of Assessment

| Methods of Assessment | N | % |
|---------------------------------------|----------|----------|
| 1. Examinations | 37 | 100.0 |
| 2. Individual Reports and Essays | 27 | 73.0 |
| 3. Dissertation | 25 | 67.6 |
| 4. Group Consultancy Projects | 15 | 40.5 |
| 5. Individual and Group Presentations | 12 | 32.4 |

Source: Author constructed

Based on the quantitative content analysis of the selected syllabuses on method of assessment, it is highlighted that examination (100%) is the major assessment method in selected courses and next most significant methods of assessment are individual reports and essays (74%) and dissertation (67.6%).

4.5 Forensic Accounting Services provided in Sri Lankan context

4.5.1. Frequency analysis

In assessing the third objective of the study, i.e. assessing the range and extent (in terms of revenue generation) of the forensic accounting services provided in Sri Lankan context, the tables of descriptive statistics illustrates 14 forensic accounting services that were included in the questionnaire which the respondents have marked to as ‘offered by your firm’ and if offered, to rank the top five forensic accounting services based on the revenue generated.

Table 4-7 Range of Forensic Accounting Services

| Forensic Accounting Services | <i>N</i> | % |
|---|----------|------|
| 1. Litigation Support | 29 | 54.7 |
| 2. Risk Management in Forensic Accounting | 25 | 47.2 |
| 3. Business Advisory in Forensic Accounting | 24 | 45.3 |
| 4. Fraud examination (Lay Witness and Investigative Services) | 22 | 41.5 |
| 5. Valuation of Damages | 22 | 41.5 |
| 6. Regulatory Investigations in Forensic Accounting | 20 | 37.7 |
| 7. Technology services in Forensic Accounting | 18 | 34.0 |
| 8. Expert Witnessing | 13 | 24.5 |
| 9. Business Analytics in Forensic Accounting | 13 | 24.5 |
| 10. Contract Assessment | 11 | 20.8 |
| 11. Corporate Misconduct Investigations | 10 | 18.9 |
| 12. Personal Injury Assessment | 9 | 17.0 |
| 13. Business Intelligence | 6 | 11.3 |
| 14. Criminal Matters Investigations | 3 | 5.7 |

Source: Author constructed

Based on the responses received for the questionnaire, 64.6% of respondents are aware of the forensic accounting services offered by their firms and 35.4% of respondents are not aware of the same (Table 1). Out of the respondents who are aware of the forensic accounting services, litigation support is the most frequently offered (54.7%) forensic

accounting service (in public practice organizations), which is consulting expert service on business litigation and dispute advisory.

Based on the responses received for the questionnaire, the top five forensic accounting services are litigation support, risk management in forensic accounting, business advisory in forensic accounting, fraud examination (lay witness and investigative services) and valuation of damages. However, '*criminal matters investigations*', '*business intelligence*', '*personal injury assessment*', '*corporate misconduct investigations*' and '*contract assessment*' are perceived least popular forensic accounting services.

Table 4-8 Extent of Forensic Accounting Services in terms of revenue generation

| | N | % | Ranking | | | | |
|---|----|------|---------|----|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 |
| 1. Litigation Support | 29 | 54.7 | 20 | 7 | 5 | | |
| 2. Risk Management in Forensic Accounting | 25 | 47.2 | 8 | 9 | 2 | 6 | 1 |
| 3. Business Advisory in Forensic Accounting | 24 | 45.3 | 6 | 2 | 3 | 1 | 4 |
| 4. Fraud examination | 22 | 41.5 | 4 | 3 | 8 | 7 | |
| 5. Valuation of Damages | 22 | 41.5 | 8 | 11 | 2 | 5 | 1 |
| 6. Regulatory Investigations in Forensic Accounting | 20 | 37.7 | 2 | 1 | | 3 | 7 |
| 7. Technology services in Forensic Accounting | 18 | 34.0 | | 3 | 2 | 2 | 8 |
| 8. Expert Witnessing | 13 | 24.5 | 3 | 4 | 6 | 2 | |
| 9. Business Analytics in Forensic Accounting | 13 | 24.5 | | 2 | 1 | | 1 |
| 10. Contract Assessment | 11 | 20.8 | | 2 | 1 | 1 | |
| 11. Corporate Misconduct Investigations | 10 | 18.9 | 2 | | | | |
| 12. Personal Injury Assessment | 9 | 17.0 | | | | 3 | |
| 13. Business Intelligence | 6 | 11.3 | | | 2 | 1 | 1 |
| 14. Criminal Matters Investigations | 3 | 5.7 | | | 7 | | |

Source: Author constructed

In assessing the extent of the forensic accounting services provided in Sri Lankan context (in terms of revenue generation), majority of respondents have ranked litigation support (37.7%) as the no. 1 ranking forensic accounting service, followed by valuation

of damages (20.8%) at no. 2, fraud examination (15.1%) at no. 3, risk management in forensic accounting (11.3%) at no. 4 and finally technology services in forensic accounting (15.1%) at no.5.

Table 4-9 Future Demand for Forensic Accounting Services

| | | <i>N</i> | <i>%</i> |
|---|------------------|----------|----------|
| 1. Litigation Support | Unsure? | 2 | 3.8 |
| | Decrease? | 1 | 1.9 |
| | Remain the same? | 22 | 41.5 |
| | Increase? | 28 | 52.8 |
| 2. Expert Witnessing | Unsure? | 2 | 3.8 |
| | Decrease? | 2 | 3.8 |
| | Remain the same? | 23 | 43.4 |
| | Increase? | 26 | 49.1 |
| 3. Fraud examination (Lay Witness and Investigative Services) | Unsure? | 1 | 1.9 |
| | Decrease? | 1 | 1.9 |
| | Remain the same? | 29 | 54.7 |
| | Increase? | 22 | 41.5 |

Source: Author constructed

Furthermore, based on the responses received for the questionnaire, majority of the respondents perceived an increasing demand for forensic accounting services such as, litigation support (52.8%) and expert witnessing (59.1%), whereas, 54.7% of the respondents highlighted that future demand for fraud examination will remain at the same level.

4.6 Chapter Summary

This section discusses the key findings from the analysis performed and highlights the consistency or inconsistency of the findings with extant literature on this subject. Subsequent to the demographic analyses performed, the study identified the most and least important *skills and knowledge areas required to provide the forensic accounting*

services. The findings depicted in Table 2, are consistent with the previous studies of Digabriele (2008) in the USA and Okoye and Jugu (2010) in Nigeria who highlighted, deductive analysis as one of the most important skill to perform forensic accounting services, and analytical proficiency and legal skills as least important skills required to perform the same services. In contrast to the US study by Digabriele (2008), Okoye and Jugu (2010) highlighted composure as one of the more important skills which is consistent with the current study. However, the results of the previous studies of Bhasin (2013), Davis et al. (2009) and Arežina et al. (2014) are not consistent with the current study, in highlighting the most and least important skills.

Moving on to the other factor, i.e. knowledge areas, respondents perceived that the knowledge of accounting and auditing are key to perform forensic accounting services, whereas knowledge on professional responsibilities have placed as least important. This finding is also consistent with the findings of Tiwari and Debnath (2017) who reported that knowledge required for forensic accountant as auditing, accounting, statistics, information technology, legal, human-behaviour knowledge.

Subsequent to the first objective, the study identified *status of forensic accounting education, in terms of content, methods of delivery and methods of assessment*. Findings depicted in Table 5 based on quantitative content analysis, indicates that majority of the selected forensic accounting syllabuses have more frequently included; introduction to forensic accounting, fraud examination, fundamentals of fraud, corporate governance and ethics, audit and assurance, fraud risk assessment, investigative procedures, financial accounting, legal system, financial reporting process and analysis, research in forensic accounting, business analytics and modelling and financial reporting standards and principles in their syllabuses. This finding is consistent with the previous studies of Rezaee and Burton (1997), Brooks and Lebel (2006) and Akyel (2012), who have reported 50 topics in forensic accounting based on perception of academicians and practitioners. The same forensic accounting topics has reduced into four modular topics as (1) Investigation and law, (2) Fraud and fraud auditing, (3) Financial reporting process and (4) Ethics. However, the study conducted by Wickramasinghe and Anthony (2017) in Sri Lankan context, has concluded by identifying 12 most important areas, out of which, indirect methods of reconstructing income, proper evidence management litigation support in special situations, employee fraud: the misappropriation of assets,

and money laundering and transnational financial flows have not been covered in the findings of the current study.

Moving on to the other factor, i.e. status of forensic accounting education, in terms of methods of delivery, findings indicate that the key methods of delivery are textbooks and articles, lectures, tutorials and e-learning techniques. This finding is consistent with the previous study of Rezaee et al. (2004) who found that, most commonly used learning mechanisms in teaching a forensic accounting course are cases, textbooks, research projects, guest speakers, and videos. It is further observed that, majority of the selected courses are conducted online, and remaining are conducted on campus. This finding was not highlighted in previous studies done on this regard.

Based on the content analysis of the selected syllabuses, it is highlighted that examination, individual reports and essays and dissertation are the most frequently used methods of assessment. As far as the researchers observes, these findings were not available in previous research studies performed on this subject. Further, it is observed that 31 out of 37 are separate forensic accounting courses and 6 are integrated into accounting and auditing courses. This finding is consistent with the previous study of Rezaee and Burton (1997), who reported that CFE practitioners required a separate forensic accounting course. However, the studies of Rezaee et al. (2004) and Zango (2012) are not consistent with the current study.

Subsequent to the second objective, the study identified *range and extent (in terms of revenue generation) of the forensic accounting services provided in Sri Lankan context*. The findings depicted in Table 7, are consistent with the previous studies of Okoye and Akenbor (2009) in Nigeria, Bhasin (2017) in India and Akkeren et al. (2013) in Australia, who highlighted, litigation support, investigative accounting, valuation and damages assessment and advisory services as frequently offered forensic accounting services in their respective regions.

Considering the extent (in terms of revenue generation) of the forensic accounting services provided in Sri Lankan context, of respondents have ranked litigation support, valuation of damages, fraud examination, risk management in forensic accounting and technology services in forensic accounting as top five forensic accounting services provided in their firms in terms of revenue generated. This finding was not highlighted

in previous studies done on this regard. Further, the respondents perceived that the future demand for litigation support and expert witnessing will increase, however, future demand for fraud examination will remain the same in Sri Lankan context. This finding is partially consistent with the findings of Rezaee et al. (2004) in the USA, Rezaee et al. (2014) in China and Bhasin (2017) in India who reported that all three mainstream forensic accounting service will increase in future. Comparison of these results with those of Rezaee et al. (2004) and Rezaee et al. (2014) indicates that Sri Lankan respondents felt that the demand for fraud examination practice of forensic accounting will remain at the same level than that in the United States and in China.

Chapter 5 Conclusion

5.1 Introduction

This chapter summarizes the overall study. Firstly it discusses the conclusion of this thesis where it explains what the objectives identified initially in the Chapter 1 are and how those objectives were achieved by performing various suitable statistical tests. Then, it moves on to discuss whether the expected outcome is achieved or not. Secondly, this chapter explains the main limitations faced during this study. Then at last it discusses future research direction for potential researchers on this area.

5.2 Conclusion

Over many generations fraud has been in existence. In past two decades, many prominent financial scandals such as, Enron, WorldCom, Satyam have been witnessed. And opportunities for the forensic accountants are growing at the rapid speed all around the globe, with a special emphasis in most of the Asian countries, as well as, all developed, developing and emerging nations. There are three main research objectives dealt in this research, which are to examine the relevant skills and knowledge areas required to provide the forensic accounting services; to assess the status of forensic accounting education, in terms of course content, methods of delivery and methods of assessment; and to examine the range, extent (in terms of revenue generation) and future demand of the forensic accounting services provided in Sri Lankan context. Thereby, in order to achieve the first and third objectives of this study, a self-administered structured questionnaire was developed through a comprehensive literature review, which was refined with expert opinion, and 82 usable questionnaires were secured. In order to achieve the second objective, quantitative content analysis was used to identify the three themes in relation to the study sample of 37 syllabuses of forensic accounting related courses available online.

In terms of findings, mean ranking and one same *t*-test analyses were performed on the data received to examine the *most important* and *least important* skills and knowledge required to provide the forensic accounting services. The five ten skills perceived by the respondents are *fraud risk assessment*, *deductive analysis*, *diagnostic*, *composure*

and *unstructured problem solving*, which are also statistically significantly different with test value of 3 and their respective mean values, and skills such as *marketing, interviewing and analytical proficiency*, perceived as least important. Similar findings have been reported in previous studies done by Digabriele (2008) in the USA and Okoye & Jugu (2010) in Nigeria. Further, the top five knowledge areas were *accounting, audit, taxation, business valuation and fraud schemes*, whereas, least mean ranked knowledge area was *professional responsibilities*. This finding is also consistent with the findings of Tiwari and Debnath (2017) who reported that knowledge required for forensic accountant as auditing and accounting.

In achieving the second objective of the study, quantitative content analysis was performed, and the findings indicate that majority of the selected forensic accounting syllabuses have incorporated topics such as; *introduction to forensic accounting, fraud examination, fundamentals of fraud, corporate governance and ethics, audit and assurance, and fraud risk assessment*. This finding is consistent with the previous studies of Rezaee and Burton (1997), Brooks and Lebel (2006) and Akyl (2012). However, this study is partially consistent with the study conducted by Wickramasinghe and Anthony (2017) in Sri Lankan context as. Further, the key methods of delivery in forensic accounting course are *textbooks and articles, lectures, tutorials and e-learning techniques*, which is consistent with the study of Rezaee et al. (2004). It is further observed that, majority of the selected courses are conducted *online*, and remaining are conducted *on campus*. This finding was not highlighted in previous studies done on this regard. Finally, in relation to second objective, it is highlighted that *examination, individual reports and essays and dissertation are the most frequently used methods of assessment*, for which the findings were not available in previous research studies.

As the final objective, the study identified range and extent (in terms of revenue generation) of the forensic accounting services provided in Sri Lankan context. The most frequently offered forensic accounting service is *litigation support, risk management in forensic accounting, business advisory in forensic accounting, and fraud examination* whereas, least frequent service is *criminal matters investigations, business intelligence, personal injury assessment, corporate misconduct investigation and contract assessment*. These findings are consistent with the previous studies of Okoye and Akenbor (2009) in Nigeria, Bhasin (2017) in India and Akkeren et al. (2013)

in Australia. Considering the extent of the forensic accounting services provided in Sri Lankan context, of respondents have ranked *litigation support*, *valuation of damages*, *fraud examination*, *risk management in forensic accounting* and *technology services in forensic accounting* as top five forensic accounting services provided in their firms in terms of revenue generated, which is not observed in previous research studies. The findings indicate that the future demand for *litigation support* and *expert witnessing* will increase, however, future demand for *fraud examination* will remain the same. This finding is partially consistent with the findings of Rezaee et al. (2004) in the USA, Rezaee et al. (2014) in China and Bhasin (2017) in India.

5.3 Limitations

The findings of this study should be interpreted subject to certain caveats. Accordingly, it should be highlighted that, only professional accountants in public practice were considered in this study. However, the spread of Big three and other practicing firms ensured that a sufficiently broad range of views were captured. Perhaps, a future study can consider the perceptions of non-accounting professionals, such as attorneys, and identify the differences in their perceptions.

5.4 Future Research Directions

In terms of significance, this study focuses on both the supply and demand sides of forensic accounting service and education, and attempts to provide information that may be useful for universities and professional bodies considering offering a course in forensic accounting in light of most recent changes in the business environment and the accounting profession in Sri Lankan context.

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Appendix 01 - List of Universities and Institutions which are offering forensic accounting courses, and selected for the study sample

| University/Institution | Country | No. of forensic accounting related courses offered |
|--|------------------------------|---|
| Brentwood Open Learning College | United Kingdom | 02 |
| West Virginia University | The United States of America | 01 |
| Northumbria University | United Kingdom | 02 |
| University of Portsmouth | United Kingdom | 02 |
| University of South Wales together with ACCA | United Kingdom | 02 |
| Asia Pacific University of Technology and Innovation (APU) | Malaysia | 02 |
| Sheffield Hallam University | United Kingdom | 02 |
| Queensland University of Technology (QUT) | Australia | 01 |
| Universiti Teknologi Mara (UiTM) | Malaysia | 02 |
| Golden Gate University | The United States of America | 03 |
| De Montfort University | United Kingdom | 01 |
| New England College | United Kingdom | 01 |
| Embry-Riddle Aeronautical University | The United States of America | 01 |
| University of Toronto | Canada | 01 |
| Vancouver Island University | Canada | 01 |
| Southern New Hampshire University | The United States of America | 02 |
| University of Wollongong | Australia | 02 |
| RMIT University | Australia | 03 |
| Swinburne University of Technology | Australia | 01 |
| Monash University | Australia | 01 |
| The Institute of Chartered Accountants of India | India | 01 |
| Sherlock Institute of Forensic Science (SIFS) India | India | 01 |
| Webster University | The United States of America | 01 |

Source: Author Constructed

Appendix 02 – Questionnaire

An Empirical Study of the Forensic Accounting Services, Relevant Skills and Knowledge and the Status of Forensic Accounting Education of in Sri Lanka

Dear Professionals,

What are we doing?

We are conducting a research to identify the level of awareness about forensic accounting services, skills & knowledge and education in Sri Lanka through the perspective of Professional Accountants in Public Practice.

Who are we?

I am Seshani Gunathilake of Department of Accounting at the University of Sri Jayewardenepura, performing a research with Dr. Roshan Ajward, Senior Lecturer of the Department of Accounting, University of Sri Jayewardenepura.

Purpose of the survey

The purpose of this study is to examine the range and extent of forensic accounting services offered in Sri Lankan context, what skills and knowledge will be required to perform above services and what is the current status of forensic accounting education in Sri Lankan context.

Who should participate in this survey?

This questionnaire is to be filled by **Professional Accountants in Public Practice** who are above the supervisory level (i.e. Supervisors, Managers and Partners etc.) and based in Sri Lanka. With much respect, we invite you to participate in the research carried out for this purpose. Your participation in this survey is completely voluntary, and anonymity and confidentiality will be ensured. It is much appreciated if you could allocate few minutes of your precious time to complete the questionnaire attached herewith.

Yours truly,

S.D. Gunathilake

Mobile : (+94) 77 442 2181

E-mail address : seshani.gunathilake@gmail.com

Principal Researcher : Dr. Roshan Ajward

Part 1: Demographics

This section will analyse on the demographic variables of the study sample. Please indicate your answers for the below questions:

1. **Gender** (Please tick ✓) ☐ Male ☐ Female
2. **Age** (Please tick ✓) ☐ 20 – 25 ☐ 26 – 30 ☐ 31 – 40 ☐ 41 – 50 ☐ Over 51
3. **Academic and professional qualifications**
 - 3a. **Highest academic qualification** (Please tick ✓)

| | | | |
|---|------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> GCE O/L | <input type="checkbox"/> GCE A/L | <input type="checkbox"/> Certificate/Diploma | <input type="checkbox"/> Basic Degree |
| <input type="checkbox"/> Postgraduate Diploma | <input type="checkbox"/> MBA/M.Sc. | <input type="checkbox"/> Ph.D. | |

3b. Professional qualification/s (Please tick all that apply ✓)

| 1. Qualification | 2. Member | |
|----------------------------|------------------------------|------------------------------|
| | 3. Associate Member | 4. Fellow Member |
| – ICASL | 5. <input type="checkbox"/> | 6. <input type="checkbox"/> |
| – ACCA | 7. <input type="checkbox"/> | 8. <input type="checkbox"/> |
| – CIMA | 9. <input type="checkbox"/> | 10. <input type="checkbox"/> |
| 11. Other (Please Specify) | | |
| – | 12. <input type="checkbox"/> | 13. <input type="checkbox"/> |
| – | 14. <input type="checkbox"/> | 15. <input type="checkbox"/> |
| – | 16. <input type="checkbox"/> | 17. <input type="checkbox"/> |

4. Firm currently employed (Please tick ✓)

☐ Big three audit firms (KPMG, PwC, E&Y) ☐ Other audit firms

5. Current Designation

☐ Partner ☐ Director ☐ Manager ☐ Supervisor
(Please tick ✓) ☐ Other (Please Specify)

6. Years of experience

6a. Years of experience in the Accounting Profession (Please tick ✓)

☐ 1 – 5 years ☐ 6 – 10 years ☐ 11 – 15 years ☐ more than 16 years

6b. Years of experience in the Forensic Accounting Profession (Please tick ✓)

☐ No Experience ☐ Less than 1 year ☐ 1 – 5 years ☐ 6 – 10 years
☐ 11 – 15 years ☐ more than 16 years

Part 2: Forensic Accounting Services

This section will analyse on the range, extent and demand of the forensic accounting services provided in Sri Lankan context.

7a. Are you aware about the Forensic Accounting Services provided by your firm?

☐ Yes ☐ No

(If your answer is 'No', please skip to Question 8)

7b. What type of forensic accounting services are offered by your firm and to what extent?

| Type of service | (Please tick ✓ if offered by your firm) | Please rank the Top Five (05) Forensic Accounting Services based on the Revenue generated from such services |
|--|---|--|
| – Litigation Support [Consulting expert services on business litigation and dispute advisory] | <input type="checkbox"/> | |
| – Expert Witnessing [Resolving litigation problems before expert trial testimony is required] | <input type="checkbox"/> | |

| Type of service | (Please tick ✓ if offered by your firm) | Please rank the Top Five (05) Forensic Accounting Services based on the Revenue generated from such services |
|--|---|--|
| – Fraud examination (Lay Witness and Investigative Services) [Identification, explanation and communication of the information behind economic and reporting events of fraud] | <input type="checkbox"/> | |
| – Valuation of Damages | <input type="checkbox"/> | |
| – Technology services in Forensic Accounting | <input type="checkbox"/> | |
| – Risk Management in Forensic Accounting | <input type="checkbox"/> | |
| – Corporate Misconduct Investigations | <input type="checkbox"/> | |
| – Business Analytics in Forensic Accounting | <input type="checkbox"/> | |
| – Regulatory Investigations in Forensic Accounting | <input type="checkbox"/> | |
| – Criminal Matters Investigations | <input type="checkbox"/> | |
| – Business Advisory in Forensic Accounting | <input type="checkbox"/> | |
| – Contract Assessment | <input type="checkbox"/> | |
| – Business Intelligence | <input type="checkbox"/> | |
| – Personal Injury Assessment | <input type="checkbox"/> | |
| <i>Others (Please Specify)</i> | | |
| – | <input type="checkbox"/> | |
| – | <input type="checkbox"/> | |

7c. In your opinion, what would be the future demand in the following three areas of mainstream forensic accounting services? (Please tick ✓)

| | Unsure? | Decrease? | Remain the same? | Increase? |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| – Litigation Support | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Expert Witnessing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Fraud Examination | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Part 3: Skills and Knowledge to perform Forensic Accounting Services

This section will analyse on the importance of skills and knowledge required to provide the forensic accounting services.

8. In your opinion what is the level of importance of following skills which are required to perform forensic accounting services?

| Skills (are the proficiencies developed through training or experience) | Not Applicable (Please tick ✓) | (Please tick ✓; 1 = Least Important, 5 = Most Important) | | | | |
|---|------------------------------------|--|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| – Investigative | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Skills (are the proficiencies developed through training or experience) | Not Applicable (Please tick √) | (Please tick √; 1 = Least Important, 5 = Most Important) | | | | |
|---|------------------------------------|--|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| – Critical Thinking | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Communication | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Deductive analysis (the ability to take aim at financial contradictions that do not fit in the normal pattern of an assignment) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Technical Accounting (the ability to apply technical knowledge in accounting) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Auditing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Diagnostic (individual's ability to identify a particular problem and define it) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Information Technology | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Conceptual Thinking | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Legal | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Interviewing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Commercial/business advisory | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Financial/Numeracy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Team working | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Time management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Fraud Risk Assessment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Marketing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Unstructured problem solving (the ability to approach each situation [inherently unique] prepared to solve problems with an unstructured approach) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Analytical proficiency | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Composure (the ability to maintain a calm attitude in pressured situations) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Identify key issues | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Research Skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Simplify the information | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Solve structured problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Think like the wrongdoer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Understand the goals of a case | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Psychological skills (ability understand the way people's mind works) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Sociological skills (used to communicate and interact with each other, both verbally and non-verbally, through gestures, body language and personal appearance) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <i>Others (Please Specify)</i> | | | | | | |

9. In your opinion, what is the level of importance of following knowledge areas which are required to perform forensic accounting services?

| Knowledge on (is the theoretical or practical understanding of a subject) | Not Applicable (Please tick √) | (Please tick √; 1 = Least Important 5 = Most Important) | | | | |
|---|-----------------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| – Professional responsibilities and practice management (ensuring productivity and efficiency within an accountancy practice) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Laws, courts and dispute resolution | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Planning and preparation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Information gathering and preservation (documents, interviews/interrogations, electronic data) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Discovery | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Reporting, experts and testimony | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Governance and Ethics | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Investigative techniques | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Fraud schemes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Economic loss quantification | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Business valuation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Accounting | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Systems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Audit | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – Taxation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <i>Others (Please Specify)</i> | | | | | | |
| – | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| – | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Part 4: Opinion

10. Comments: Please feel free to comment on Forensic Accounting Practice in Sri Lanka.

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Thank you for your cooperation and assistance. If you wish to receive a copy of the results of this study, please check the following space and enclose your business card. []