THE BABY HDULTS HDUL

HOW VIRTUAL BABIES

BECAME THE FUTURE OF TERRORIST

FINANCING AND CRIMINAL MONEY LAUNDERING

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Standard Disclaimer & Thank you

For educational and documentary purposes only. Do not birth or kill anyone virtually. Some details have been omitted from this publication so that 500 million people across the western world do not wake up virtually dead.

The book is written and intended for the Government, the legal establishment, Insurance companies and law enforcement. I have outlined techniques in this book so that criminal investigators can alter their search algorithms and positive markers for money laundering and insurance fraud on a new techniques. This is not a book for criminals. Now that everyone is aware of these techniques it can be blocked at the source of the problem, our Birth and Death record register around the world.

A special thankyou to the doctors, lawyers, funeral directors, sociologists, sci-fi writers, technologists and intelligent people from around the world so that I could complete this book.

BLURB

I investigated the birth and death registration systems around the world and discovered disturbing vulnerabilities. The government's mandate is to increase the accuracy of birth and death registrations using online registration. They are reducing identify theft by strengthening the security around the birth certificate, like using holograms, and making it more difficult for criminals to obtain them. In doing so, they are making an unforeseen error. They have created the conditions where the **Virtual** is born. A criminal that only exists on paper, a shield to protect the criminal behind it.

"The baby harvest" is the concept of a criminal syndicate: making and raising virtual babies to adulthood, to be put on the shelf for money laundering, fraud and drug and firearm importation. The babies, once reaching adulthood, are now Virtuals who will obtain finance, enter the stock market, obtain large life insurance policies, and eventually be harvested ('killed off') at investment maturity.

PREFACE

The full-time role of the security researcher is starting to gain traction in our industry. More and more companies are using security research to gain publicity for their own company's growth. As more and more security researchers start documenting and presenting their security findings, we must all rise to a more professional level than our predecessors in the material we release. If we are to call ourselves researchers, we need to apply what other industries do, for example, in science or medicine. We must draw in academic, government and industry expert's books or papers to support or complement our own findings. We need to move away from the quick hit 'Bug crowd" who reward with money prizes. We must do more than reveal a vulnerability and properly document the findings, why it's vulnerable, how to fix it in the short term and devise long-term strategies to prevent it. There are hundreds of secure coding books we as researchers can bring into books or papers to ensure the audience reader gets the full picture. If we do not, companies and governments will continue to get hacked and all our information will be leaked to the public until not one scrap of information about us will remain private.

This book was written for this very reason. It started as a vulnerability which turned into a whitepaper and one year later a book. The industry has been good to all of us, it's time we all put something back and earn our titles as security researchers. We must work together with additional evidence, proving or disproving our research in a supportive way. We need to move our industry away from using Twitter to publish our results claiming to hack into an airplane's entertainment system, because this is not where we want our industry to go. The community and other researchers in and out of our industries will continue to lose respect for our trade, especially if we don't have all the documentary evidence a researcher must provide for peer review and analysis. If any of my research logic is wrong, it can be updated by other researchers and we have living research which can be forever analysed and alter our incident alerting heuristics.

About the Author

In my line of work as a professional hacker, you rub shoulders with corporate business, lone wolf criminal hackers, international hacking crews, scammers and large criminal syndicates. I've seen criminal syndicates make large financial transfers disappear without a trace at both the sending and receiving banks; a transfer from Dubai to Switzerland in the blink of an eye as though it never happened.

With over twenty years of experience, I am a leading expert in the world of professional 'hackers'. My company, Kustodian, is made up of elite professionals from around the world, and has been responsible for penetrating some of the largest global companies security systems; companies YOU rely on every day to protect you – banks, insurance companies and governments.

Introduction

This book began when I saw a news report in 2014. It was in Melbourne, Australia, where a hospital accidentally sent out two hundred death notices to patients instead of discharge notices. I thought to myself, how could this possibly happen? It was my understanding from being raised on American TV, that historically, there has always been strict procedures in place for the death industry. This involved a doctor attending the scene of a deceased, filling out a cause of death form, and the next of kin being contacted by the funeral director for burial of the body.

Death Industry

As a security researcher, I started to investigate the death industry, initially in Australia, and then expanded my research globally. I wanted to see how easy is was to kill someone digitally, to obtain a death certificate, and if I could shut down their bank accounts and their lives whilst they were physically alive. This research covered

roles of the Medical Practitioner, Coroner ("Medical Examiner"), Funeral Director and the Government registry. I discovered the government's desire for more accurate, centralized death records and a simpler online registration unearthed security vulnerabilities. It is these vulnerabilities that then opened up a whole can of worms and ideas for me. Who could I kill? Which countries could I kill in? Could I digitally kill myself and enjoy my life insurance policy payout whilst I was really alive? This book will not only focus on the lack of security controls but how we got here in the first place. The methods in this book allow any of us to virtually kill off our bosses, our parents, husbands or wives, girlfriends, neighbors or investigating police officers and profit from the experience.

Our government is responsible for the protection of its citizens, this includes the documentary evidence of births and deaths. This is not a book for criminals, but for governments around the world to take the protection of its data assets seriously.



Figure 1 Snapshot of the Herald Sun Melbourne Australia

Birth Industry

After finishing my research on the death industry I then turned my attention to the birth industry and the role of the doctor/midwife, parents and the government in registering a new born. I investigated the process for registering a baby and the government's struggle to ensure people register their children

when they are born. This seemed unusual to me at first, but there were a multitude of reasons why this was the case and we will delve into them. I discovered that the governments around the world had introduced an online portal for the registration of births. My research found it was quite simple to register a fake child - a **virtual** child.

Combining the two

So with this knowledge of the death and birth industry and the security vulnerabilities that plagued both of them, I combined the two together and developed a new concept for criminals. A technique that would assist with money laundering, life insurance fraud, medical insurance fraud and other criminal activities. A technique that law enforcement and governments will need to adjust to and modify existing big data heuristic fraud patterns. The technique is called The Baby Harvest.

The Baby Harvest

"The baby harvest" is the concept of creating and raising virtual babies to harvest their identities when they are adults. I call them **Virtuals**. They will be killed off when they are of age and harvested for their finances. The technique is based on a shelf company.

A shelf company is used by criminals or terrorists who pay all their fees and file incorporation papers annually. They then put them on the shelf for years, sometimes decades. They pay the minimum corporate tax, build up a credit rating, and comply with filings to create an established, creditworthy business that can be used to launder all kinds of transactions.

The Shelf babies or **Virtuals** will follow the same concept. They will be born, registered with the government, open bank accounts, get home loans and life insurance. They will be married to other virtual adults, get passports and when they are ready for harvest, they will be killed off for their finances, life insurance or sale of passports to other nations. This is a long-range technique spanning decades that will be the next big thing in terrorist financing and criminal money

laundering. This book is an introduction to the concept, but goes into detail about

- The Death Industry
- The Birth Industry
- How to document and store details about your Virtual
- Why this isn't identity theft
- Money laundering using your Virtual
- Advanced stock market leveraged techniques
- Obtaining the largest Life insurance for your Virtual
- Bankrupting your **Virtual**
- The Law and the Dead
- Harvesting your **Virtual** for maximum profit

News Article: Courtesy of the Herald Sun Australia 2014

"MORE than 200 Victorian patients were temporarily written off as dead after a major metropolitan hospital accidentally sent out death notices to their general practitioners. The error resulted in GPs (General Practitioners) mistakenly being sent a fax to say their patient had died following their hospital visit. All affected GPs were contacted by the Austin Health within hours to apologize and inform them of the mistake.

The Australian Medical Association, Victoria, said the incident was unacceptable and may have been distressing to GPs who often had long-term relationships with patients and their families. The Herald Sun understands the majority of GPs were alerted to the error before they had the chance to call families, but at least one GP contacted a family member to express their condolences. Austin Health has apologized for the incident, which was caused by human error. The Austin hospital accidentally sent out the death notices. The health service notifies GPs automatically when their patients are discharged from hospital. Austin Health spokeswoman, Taryn

Sheehy said, "The notifications sent out in the early hours of Wednesday July 30 incorrectly advised GPs that their patients, who had been discharged the previous day, had died. The error was realized later that morning. We apologized unreservedly to affected clinics who, for the most part, were very understanding about the error," she said. "The mistake was made when the template notifying GPs of his or her patient's death was being updated and it was accidentally saved as a standard template. The error was not related to the hospital's new patient choice booking system nor had it affected patient care," she said.

AMA Victoria president, Dr. Tony Bartone said, "The error was unacceptable. Many of these GPs have long relationships with these patients and their families," he said. It would have been distressing to receive such a fax, especially relating to the unexpected death of children and teenagers. Dr. Bartone said the incident underlined the importance of a strong and robust statewide IT system for Victorian health services."

Figure 2 Article from the Herald Sun Melbourne Australia

The Death Registration Process

Introduction

Before we look at the security vulnerabilities and understand why there are security vulnerabilities in the death process, we must firstly take a look at how we got here in the first place. Governments are struggling to ensure accurate birth and death records. Almost two fifths of all deaths around the world are not registered at all, mostly in underdeveloped countries, but a small percentage occur in developed western counties as well. Governments in countries like North and South America, Canada, Australia and Europe have introduced policies for a more centralized and accurate method for the registration of deaths. There have been cases of state-based registrars in the United States that have been flooded or burnt down resulting in birth and death records being completely destroyed. But having an online centralized solution, with the removal of doctors' chicken-scribble

handwriting, means that all records can be stored accurately, centrally, backed up and provide real time death reporting during a disaster......but what about security?

Death process

The government uses civil registration systems to register the important events of its people, including births, deaths and marriage. The main purpose of civil registration systems is to create and protect the civil rights of the citizens. Additionally, they provide a source of data for compilation of important statistics by the government to assist with infrastructure development and planning. The government requires its citizens to notify it in the case of any events that occur which will cause an effect on registries such as births, deaths and marriage. In the United States, registration involves establishing a legal document and important records, such as death certificates, that are kept by the Office of

Vital Statistics in each state.¹ A lot of importance is placed on proper storage of these vital documents as they play a substantial role in government planning. This is why governments around the world are moving to an online central solution to preserve these documents. A digital copy allows any person who loses a document to simply request another copy.

The first step that is taken upon the death of a person is to get a medical notification of death from the hospital's doctor. In this regard, the certificate of death medical certificate facilitates registration of the death. The key responsibility of the physician is to complete the medical part of the death registration with a great sense of integrity. It is a requirement that the physician completes the form within a period of three days, sign it and send it to the funeral director. The attending physician is responsible for pronouncing and reporting the death.² The medical certification involves filling out the date and the time when the death was

¹ Thomas, KK 2011, *Deluxe Jim Crow: Civil Rights and American Health Policy,* 1935-1954, Athens, University Of Georgia Press.

² Merson, MH, Black, RE & Mills, AJ 2012, *Global Health: Diseases, Programs, Systems and Policies*, Burlington, MA, Jones & Bartlett Learning.

pronounced. In many circumstances, a physician is allowed to both pronounce death and report the cause of death, and a different certifier may be required if the attending medical doctor is not available. The physician is required to determine the cause of death and events that led to death, if possible, and to clearly outline them.

The medical doctor returns a fully signed and completed death certificate form to enable the funeral director to file it with the local registrar or state agency within five to seven days of the death. In certain conditions, the death may be referred to a coroner who will consequently confirm the cause of the death. In this case the investigation of the death by the coroner takes a longer time, so an interim death certificate can be issued by the registry which will help to settle the estate of the deceased.

In a situation where a death occurs in the absence of medical attendance, or when death is due to accident, suicide or trauma, the physician should report the issue to the Coroner or medical examiner 'ME' for more investigation into the cause of death. The

medical examiner will complete the death certification in place of the physician and sign it. The ME is also responsible for answering any question relating to the cause of death from the state registrars.

Once the doctor and, if applicable, the Medical Examiner complete their section of the document, the funeral director takes over organizing the funeral with the agreement of family members. The funeral director has the responsibility of completing the part about personal data in the death certificate. This is the same document in the U.S. that the doctor or 'ME' has just completed. Particulars, such as social security number, are verified and checked to ensure they are correct. The funeral director may obtain the information from the next of kin or other sources such as medical records or a copy of the birth certificate. The funeral director has to obtain authorization from the physician or 'ME' so the body can be removed from the place of death.

³ Long, TG 2013, *The Good Funeral: Death, Grief, and the Community of Care.*

Another key responsibility of the funeral director is to carry out a follow-up with the certifying medical doctor. In this regard, they will review the death certificate and ensure the certificate is filed. Filing of the death certificate with a local registrar is also a primary responsibility of the funeral director to enable processing of the death certificate.

According to Civil Registration Act 2004, the deceased's relatives hold the responsibility of registering the death in a timely manner to avoid late registration. In this regard, the relative must possess enough knowledge relating to the deceased to allow effective registration of the death. In a situation where there is no relative to register a death, a qualified informant is entitled to take upon themselves the role of registering the death within a specific time. A person who witnessed the death of the deceased is also eligible to register the death as well as any other person with the

deceased's details.⁴ Regardless of an individual's citizenship, death is always registered in the country where it occurred.

Death certificates contain various details which include date and place where the death occurred. These two particulars should be specific so as to provide accurate details relating to death. Place of birth and sex of the deceased are also key details that are usually found in the death certificate. ⁵ The names of the deceased parents are highly regarded as they give identity to the deceased person and details such as date of birth, address and siblings of the deceased. The death of a person may not be clear and a postmortem may be recommended. Taking this into account, the details of the coroner, such as names and the place of business may be required to be written into a death certificate. The registrar will record the date of registration and then sign the certificate. The last

⁴ Merson, MH, Black, RE & Mills, AJ 2012, *Global Health: Diseases, Programs, Systems and Policies*, Burlington, MA, Jones & Bartlett Learning.

⁵ Holtz, C 2013, *Global Health Care: Issues and Policies*, Burlington, MA, Jones & Bartlett Learning.

component of the death certificate is the signature of the informant who is registering the death of the deceased.

Certifying the cause of death

The medical examiner or coroner's primary responsibility in death registration is to complete the medical part of the death certificate.

The medical certification includes:

- Date and time pronounced dead;
- Date and time of death;
- Question on whether the case was referred to the medical examiner or coroner;
- Cause-of-death section including cause of death, manner of death, tobacco use, and pregnancy status items; Injury items for cases involving injuries;
- Certifier section with signatures.

The proper completion of this section of the certificate is of utmost importance to the efficient working of a medical-legal investigative system.

The official death certificate from the registry

The third step in death registration involves the government department such as the registrar or Births, Deaths and Marriage agency sending the death certificate to the next of the kin. Registration of death is free but there is a fee charged for obtaining the certificate. The relative of the deceased is required to make the necessary arrangement regarding this fee to enable him/her to obtain the certificate. The Registrar (U.S) or the Birth, Deaths and Marriages 'BDM' (Australia) is responsible for maintaining an accurate record of all deaths. The death certificate will be required by the government agencies and insurance companies in order to facilitate the settlement of the deceased's estate.

Registration of death which occurs at home

An unexpected or expected death may occur at home, which makes registration different from a hospital death. A physician may have been in attendance during the death and therefore a funeral director may bring a certificate to the physician for completion. If the physician was not in attendance when the death was occurring, he or she can give a verbal approval to remove the remains of the deceased.⁶ After this, the funeral director takes the form to be signed by the physician.

Once the funeral director gets the cause of death certificate, it now becomes their responsibility to register it. In this regard, they will need to verify the details of the deceased, such as date of birth, place of residence, and age, among other particulars. After the funeral service has occurred the death certificate will be registered at the department of Vital Statistics. Lastly, the certificate once finalized will be available to the next of kin.

⁶ Annal, D & Collins, A 2012, *Birth, Marriage and Death Records: A Guide for Family Historians, Barnsley, South Yorkshire, Pen & Sword Family History.*

There are various circumstances that prompt the death to be registered by the coroner. In Australia, if the death occurs in a Hospital, in a public place, was unnatural or in a prison, a coroner will be required to complete the cause of death. A death may be referred to a coroner if the cause of death is not known, or death was as a result of violence. In case the deceased had not been attended to by a medical doctor for a long time or during his or her last illness, a coroner may also be referred to the case.⁷

When the death occurs during a hospital operation, the coroner may decide the reason behind death is clear and therefore, no postmortem will be required. The doctor will consequently sign the medical certificate and the applicant will take the certificate to the registrar. The coroner will finally issue the certificate indicating the death is clear and no postmortem is required. In case the coroner holds an inquest, the death cannot be registered until after the

⁷ Thomas, KK 2011, *Deluxe Jim Crow: Civil Rights and American Health Policy,* 1935-1954, Athens, University of Georgia Press.

inquest.⁸ The coroner holds an inquest if the cause of the death is not known. The coroner may issue an interim death certificate as evidence of death.

A coroner may opt for a postmortem to investigate the cause of the death which will be performed in either a hospital or a mortuary. As soon as the process is complete the coroner releases the body for the funeral service. The coroner sends a document to the registrar indicating the cause of the death if the body is released with no inquest.

Online and paper-based death registration

Approximately 38 million annual deaths globally are never registered. There are many barriers that are to blame for this number of unregistered deaths, which will be discussed further.

Over the past few years, many countries have embraced

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⁸ Engelen, T & Shepherd, JR 2011, *Death at the Opposite Ends of The Eurasian Continent: Mortality Trends in Taiwan and The Netherlands 1850-1945*, Amsterdam, Aksant.

⁹ Long, TG 2013, The Good Funeral: Death, Grief and the Community of Care.

technology in regards to death registration to ensure people are registered as being deceased. Online registration of death has proven to be very effective as it is user friendly and it uses the internet as opposed to an official form only available at a registry office. The applicant is required to access a form online where he or she may fill out the details of the deceased person. 10 The key benefit of using an online platform is the speed of processing and accuracy without handwriting constraints. In this regard, an online application takes the minimum possible time to process the death certificate as there is no paper work involved. Costs associated with printing the forms are also eliminated. Saving of time is also a primary benefit of online registration as the time spent to travel to the registry is eliminated. Lastly, online methods encourage many individuals to register death and fulfil a legal requirement. Online methods of death registration are commonly used in Canada, the U.S. and Australia.

¹⁰ Greenan, J 2007, *The Executor's Handbook*, Toronto, CCH Canadian.

Importance of death registration

The significance of death registration cannot be overemphasized. There are various benefits associated with death registration such as the death certificate acts as permanent record. The death certificate provides the details about the decedent, the cause of death, and the final disposition. In this regard, death certificates are usually required to obtain permission for the burial. This death certificate permits the application for settlement of a pension claim, transfer of title of property as well as application for insurance benefits. The certificate acts as documentary evidence and in case of any question regarding the death, can be submitted to a court of law as evidence of death.

Death certificates can also be a source of information for the national mortality statistics. 11 They provide the required data for health and medical related research. The information is used to plan which area of medical research requires maximum funding

¹¹ Thomas, KK 2011, *Deluxe Jim Crow: Civil Rights and American Health Policy,* 1935-1954, Athens, University Of Georgia Press.

and which area requires less concern. Therefore, this information is significant in setting policies and goals regarding public health and also the conducting of health research.

Records from death certificates are utilized in the prevention of a given disease. The government identifies a specific disease that is causing deaths and more effort can then be directed toward eradication of this disease. 12 A death certificate also assists government planning for facilities and infrastructure as the government is able to identify the population in a certain area. In the situation where deaths unregistered, and the are documentation of causes of death are not completed, it will be challenging for the government to design public health policies which are effective in reducing deaths or planning resources for the community. Measuring the impact of these policies will also be hindered.

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¹² Engelen, T & Shepherd, JR 2011, *Death at the Opposite Ends of the Eurasian Continent: Mortality Trends in Taiwan and The Netherlands 1850-1945*, Amsterdam, Aksant.

Death registration in underdeveloped countries

There are various obstacles which prevent registration of deaths in underdeveloped countries. The lack of effective infrastructure or laws that make it obligatory to register deaths, is one such obstacle. Absence of laws requiring individuals to register a death automatically lead to an increased number of unregistered deaths. A significant emphasis is rarely placed on these laws, hence people develop a sense of ignorance toward registration. Administrative challenges, such as having to require a coroner to investigate the cause of the death, delays registration.¹³ Taking this into consideration, many individuals will opt not to register a death rather than going through the complicated process.

Economic barriers in poorer countries equally contribute to the increased number of unregistered deaths.¹⁴ Additionally, the individual who is applying for the death certificate may lack enough money to pay for transport to the registration offices. In this case,

¹³ Greenan, J 2007, *The Executor's Handbook*, Toronto, CCH Canadian.

¹⁴ Annal, D & Collins, A 2012, *Birth, Marriage and Death Records: A Guide for Family Historians*, Barnsley, South Yorkshire, Pen & Sword Family History.

they will simply ignore the death registration process. The government registration offices lack enough money to acquire proper systems for death registration such as staff, computers or access to a central online method which makes the work easier. Equally as important, they also lack a better means of storing the death records, hence death will probably not be properly recorded.

Geographical locations that are remote will also hinder many individuals from accessing the registration centers. ¹⁵ These areas lack accessibility to transport and the distance barrier hinders movement of these individuals. Individuals in urban areas tend to travel to these registration offices because they are accessible. Many of the registration offices are located in large central towns depriving the rural individual an opportunity to register deaths.

Lack of awareness and different perceptions among individuals toward death registration hinders registration. ¹⁶ In this regard, a notable number of individuals lack awareness of the importance of

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¹⁵ Long, TG 2013, The Good Funeral: Death, Grief and the Community of Care.

¹⁶ Merson, MH, Black, RE & Mills, AJ 2012, *Global Health: Diseases, Programs, Systems and Policies*, Burlington, MA, Jones & Bartlett Learning.

death registration to the community. Consequently, this translates into unregistered deaths. There is also limited information available to citizens regarding the process followed when registering a death and applying for a death certificate. In this regard, some individuals innocently avoid death registration.

Strengthening the registration of death

Various strategies can be adopted by governments to ensure every death is registered. The primary strategy is creating awareness among the people through civic education.¹⁷ Awareness can be created through television, radio, and online among other social media platforms. The significance of death registration should be emphasized to these individuals so they can view the process in a different perspective.¹⁸ There has been a perceived notion that death registration and application for a certificate is complex and

 $^{^{17}}$ Long, TG 2013, The Good Funeral: Death, Grief and the Community of Care.

¹⁸ Engelen, T & Shepherd, JR 2011, *Death at the Opposite Ends of the Eurasian Continent: Mortality Trends in Taiwan and The Netherlands 1850-1945*, Amsterdam, Aksant.

complicated, while in reality this is not the case. This perspective plays a substantial role in increasing the number of unregistered deaths. Therefore, it is the role of government to create enough awareness relating to the process of death registration.

Secondly, establishing a legal framework will enhance death registration and make it a mandatory requirement. Over the past few decades, death registration has been left optional for the family members in these countries. The burden of death registration has been overwhelming, making it hard for the family members to register a death. However, with effective infrastructure and legislature, the number of deaths being registered can increase. This can be achieved through cooperation between the government and its citizens. The stipulated legal framework should provide enough emphasis on the responsibility of the government as well as its citizens in death registration. Equally important, the legal framework should also ensure adequate and clear instructions are made available on the forms to give the applicant clear guidelines.

Allocation of enough resources to the registration offices can substantially increase the number of death registrations.¹⁹ Sometimes the registration offices lack the material needed for registering deaths including handwriting, lack of birth or next of kin details. Proper mechanisms should be adopted to ensure they get enough support in terms of money. Additionally, more registration centers should be relocated to rural areas. Owing to the fact that many individuals do not register deaths, moving the registration centers to rural areas will motivate them to increase death registration.

Training of medical doctors who usually establish the cause of death can lead to faster registration of death. Doctors are sometimes reluctant to establish the cause of death and this may delay registration.²⁰

Lastly, adoption of modern technology in death registration should be embraced. Owing to the fact that manual registration has been

¹⁹ Holtz, C 2013, *Global Health Care: Issues and Policies*, Burlington, MA, Jones & Bartlett Learning.

²⁰ Greenan, J 2007, *The Executor's Handbook*, Toronto, CCH Canadian.

delaying registration, adoption of modern technology will increase the rate of death registration.²¹ Costs incurred in the printing of forms will be eliminated and many people will be motivated to register death online as it is faster. Modern technology will also ease the storage of death records and retrieval will be quicker. Individuals will comfortably register deaths from their mobile phone handset when registration is made online, hence eliminating the need to travel to registry offices.

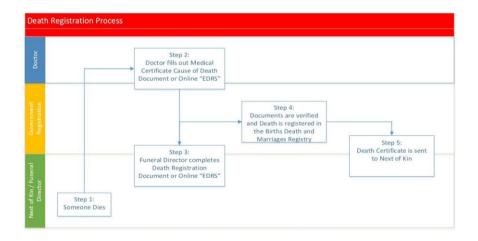


Figure 3 Death Registration Process

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²¹ Annal, D & Collins, A 2012, *Birth, Marriage and Death Records: A Guide for Family Historians*, Barnsley, South Yorkshire, Pen & Sword Family History.

The vulnerabilities in the Online process "The Doctor"

As discussed, traditionally the doctor would be called in by the next of kin if the deceased had died at home. The doctor would fill out the Certificate of Death in the United States or the Medical Certificate of Cause of Death (MCCD) in Australia. If someone had died in a hospital, the Coroner or Medical Examiner would perform this role. This hardcopy, paper-based process has now moved online in most western countries.

Moving online - EDRS

In the United States, the online system for doctors for the Certificate of Death is called the Electronic Death Registration System (EDRS). This was rolled out in 2005 and by 2013 most states in the United States had migrated to EDRS or were finalizing its deployment. This state-based, centralized repository makes it easier for government departments to accurately keep a record of all deaths. Doctors are notorious for bad handwriting which leads

to errors in the Death Certificates being issued and the online solution fixes this issue. In fact, in California, doctors were so used to the paper-based system, that instead of using EDRS, they would scan the Certificate of Death hand-written document and attach it to the EDRS record as an attachment. In 2013, California has now banned this process and does not allow scanned copies of the Certificate of Deaths to be submitted to the EDRS portal by doctors who prefer the old traditional handwritten methods. There are two reasons why this was banned; an increase in man hours needed for the registrar in California to transcribe the Certificate of Death scanned sheet, and more importantly, the chance of error in transcribing the doctor's handwriting into the system. EDRS is also used by the funeral director for burial permits and next of kin details. EDRS allows doctors to register deaths in the shortest possible time frame allowing real time death records which is crucial in a disaster. During hurricane Sandy in the United States, the Centre for Disease Control could monitor death tolls in real time and allocate rescue resources to the areas hit the hardest.

EDRS allows for mass mortality surveillance.

100	U.S. STANDARD CERTIFICATE OF DEATH OCAL FILE NO. STATE FILE NO.									
	1. DECEDENT'S LEGAL	NAME (Include	AKA's if any) (First,	Middle, Last)		2. SEX	SOCIAL SE	CURITY NUMBER		
	4a. AGE-Last Birthday (Years)		EAR 4c. UNDER	R 1 DAY 5	DATE OF BIRTH (/lo/Day/Yrj 6. BIRTHPLACE (City and State or Foreign Country)				
	()	Months Day	ys Hours	Minutes						
	7a. RESIDENCE-STATE		7b. COUN	TY		7c. CITY	DR TOWN			
	7d STREET AND NUMB	ED		7e. APT. N	O Tri zip cor	1		7a. INSIDE CITY LIF	MITON V	. No
							TITLE COLUCTION NAME			
8. EVER IN US ARMED FORCES? MARITAL STATUS AT TIME OF DEATH				□ Widowed	SURVIVING SPOUSE'S NAME (If wife, give name prior to first marriage) idowed					
l	11. FATHER'S NAME (F			anico il oni	ii.	12. MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last)				
ě										
Completed Verified IERAL DIRECTOR:	13a. INFORMANT'S NAM	ΙE	13b. RELATIONSHI	P TO DECEDE	NT	13c. M	AILING ADDRESS (Stre	et and Number, City, S	tate, Zip Code)	
red /			14 PI A	CE OF DEATH	(Check only one: se	a instruction	c)			
F 5	IF DEATH OCCURRED	IN A HOSPITAL					RE OTHER THAN A HO	SPITAL:		
2 2	□ Inpatient □ Emergence						ong term care facility 🛚	Decedent's home		
To Be Comple FUNERAL I	15. FACILITY NAME (If n					E, AND ZIP	CODE		17. COUNTY O	F DEATH
1	18. METHOD OF DISPOS			19. PLAC	E OF DISPOSITION	(Name of or	emetery, crematory, othe	r place)		
□ Donation □ Entombment □ Removal from State □ Other (Specify):										
20. LOCATION-CITY, TOWN, AND STATE 21. NAME AND COMPLETE ADDRESS OF FUNERAL FACILITY										
	22. SIGNATURE OF FUN	IERAL SERVICE	E LICENSEE OR OT	HER AGENT				23.	LICENSE NUMB	ER (Of Licensee)
	ITEMS 24-28 MUST	BE COMP	LETED BY PER	RSON	24. DATE PRONO	CONOUNCED DEAD (Mo/Day/Yr) 25. TIME PRONO			RONOUNCED DEAD	
	WHO PRONOUNCE									
	26. SIGNATURE OF PER	SON PRONOU	NCING DEATH (Only	y when applica	ble)	27. LICENSE NUMBER 28. DATE SIGNED (Mo/Day/)			(Mo/Day/Yr)	
	29. ACTUAL OR PRESU	MED DATE OF	DEATH	20 4	CTUAL OR PRESUM	ED TIME OF	DEATH	124 WAS MEDIC	AL EXAMINER OF	
	(Mo/Day/Yr) (Spell M		DEATH	30. A	DIGAL OR PRESON	IED TIME OF	DEATH		NER CONTACTED? Yes No	
CAUSE OF DEATH (See instructions and examples)								Approximate		
	32 PART I Enter the chain of events, diseases injuries or complications, that directly caused the death DO NOT enter terminal events such as cardiac						interval: Onset to death			
IMMEDIATE CAUSE (Final										
	disease or condition resulting in death)	> a		Due to (or a	s a consequence of):					
	Sequentially list condition									
	if any, leading to the cau listed on line a. Enter th	ise e		Due to (or a	s a consequence of):					
	UNDERLYING CAUSE (disease or injury that	c		Due to (or a	is a consequence of)	:				
	initiated the events resu in death) LAST	lting d								
	PART II Enter other signi	ficant conditions	contribution to deat	but not recult	na in the underlying	anico ciuna	n PART I	ISS WAS AN A	LITOPSY PERFO	PMED2

Figure 4 Traditional Certificate of Death USA

Electronic Death Registration System Security

Part of my research was to investigate both the Australian and the American Electronic Death Registration System. Each U.S. state that had used an online death registration system differed slightly but they all followed the same process flow. The Electronic Death Registration System security authentication protection on the surface seemed guite secure. A secure portal with a username and password protected the system from misuse from external threat actors. Only a registered doctor would be able to log in with a unique username and password. As seen in Figure 5, a registered doctor would put in their username and password into the system to access the Electronic Death Registration System. Once authenticated, the doctor could enter a new death registration, modify an existing entry or perform a search for existing entries. However, if you were a doctor or pretending to be a doctor and had never registered for the Electronic Death Registration System, by either using the DIY self-service option or sending in the required forms, you could now self-register yourself for EDRS. For those states that don't have a DIY Self-Service portal, by filling out an online application and emailing or faxing it off, access is emailed within a few days.

This feature was obviously built-in to make the job of administrators easier within EDRS. Considering there are over 500,000 active physicians within the U.S., it probably came down to cost of maintenance. This way, doctors could service themselves including resetting their own forgotten passwords or changing a registered office address or contact details.



Figure 5 Electronic Death Registration System Portal

Self-Service Registering

You can see in Figure 6, this state allows for DIY registration. A user can select 'Register' I can now select from a Physician, Medical Resident, Nurse, Mortuary Practitioner and others. If you selected

"I am a Physician", then "Register a new user option" the doctor can now can self-register as a doctor for EDRS for this state.



Figure 6 Electronic Death Registration System Registration

Documentation on the Electronic Death Registration System and state registration can easily be found online for every state to adjust for the differences in state-based systems. A google search will reveal all states' online training for physicians and funeral directors. Some even come with training videos on how to use EDRS.

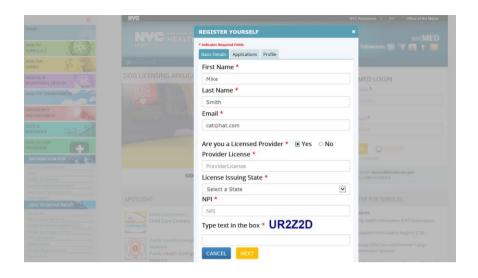


Figure 7 New York Self registration

The self-registration section is very straight forward to complete and can be seen in Figure 8 for this selected U.S. state. The doctor simply enters their name, address, medical license/registration number, email address, **desired username and password.** Yes, you read that right, the doctor chooses their own username and password.

			Physician Registration		
Personal Information					
* First Name			Middle Na	ame	
* Last Name			Su	ffix	
* Medical License Number	P		* Issuing St	tate	V
* Address as on license					
* State		- 1	* City		* Zip
The contact informatio					
	n provided below	will be used or		ou and will not be s	
systems.	n provided below	will be used or	nly within EDRS to contact yo	ou and will not be s	snared among any other
Salar	n provided below	Ext:	nly within EDRS to contact yo	ou and will not be s	snared among any other
	n provided below		nly within EDRS to contact yo	ou and will not be s	snared among any other
* Telephone Number 1	n provided below	Ext:	nly within EDRS to contact yo	ou and will not be s	snared among any other
* Telephone Number 1 Telephone Number 2 Telephone Number 3	n provided below	Ext:	Fax #	ou and will not be s	-
* Telephone Number 1 Telephone Number 2 Telephone Number 3 * Email Address		Ext:		ou and will not be s	The state of the s
		Ext:		ou and will not be s	mareu among any outer
* Telephone Number 1 Telephone Number 2 Telephone Number 3 * Email Address User Access Informati * Desired Username		Ext:		ou and will not be s	snared among any other
* Telephone Number 1 Telephone Number 2 Telephone Number 3 * Email Address User Access Informati	on	Ext:		ou and will not be s	nared among any other
* Telephone Number 1 Telephone Number 2 Telephone Number 3 * Email Address User Access Informati * Desired Username * Password * Re-type Password	on	Ext: Ext: Ext:	Fax #		any outer
* Telephone Number 1 Telephone Number 2 Telephone Number 3 * Email Address USER ACCESS Informati * Desired Username * Password * Re-type Password The password must have	on	Ext: e	Fax #		

Figure 8 DIY Physician portal registration

Self-Service Registering Checks

The system in some states verify the doctor's name, office address, ZIP code and medical license/registration number by matching to a central database before the registration is successful. But there is no verification checks on the phone number or email address for successful registration. A hacker could enter all the doctor's details in the self-registering portal but not enter in the doctor's real phone number or email address. Instead, the hacker or "pretend doctor" would enter a prepaid burner cell number and a free

untraceable email address such as Drsmith@gmail.com. A hacker could self-register as a doctor in about 30 minutes and start killing people off by performing the doctor's role in performing the Certificate of Death process, leaving only the Funeral Director role to complete the full death registration process.

Public professional medical database

Where would a hacker get all those details about a doctor? An office location and first/last name should be easy to find but what about Registration or Medical License number and issuing states.

As it turns out, all doctors details around the word are publicly available online to determine if a doctor is a registered doctor or not. This way you can see if your doctor is licensed or hospitals can verify if the doctor is still licensed to practice. A search on any doctor using the country or state-based physician search will reveal all the details required to enter this into the portal for do-it-yourself registration, as shown in Figure 9 for California and Figure 10 for

Australia or Figure 11 for other countries. Each country's doctor registration verification check is just a Google search away. For those states that don't have an online DIY register system, by simply by filling out a request form with a burner cell number and a free untraceable email address the hacker can gain access to EDRS.



Figure 9 Internet search on doctor details California USA

Miss Adele Maree Smith Profession: Nurse			
Registration number:	NMW000	Endorsements:	No
Status:	Registered	Notations:	No
Registration expiry date:	31/05/2016	Conditions:	No
Principal place of practice:	Warrnambool	Undertakings:	No
	VIC 3280	Reprimands:	No
Division/ Registration Type:	Registered Nurse (Division 1), General		
View Details			
Dr Adriaan Johannes Smith			
Dr Adriaan Johannes Smith Profession: Medical Practit	ioner	Endersements	No
Dr Adriaan Johannes Smith Profession: Medical Practit Registration number:	ioner MED000	Endorsements:	No
Dr Adriaan Johannes Smith Profession: Medical Practit Registration number: Status:	ioner MED000 Registered	Notations:	No
Dr Adriaan Johannes Smith Profession: Medical Practit Registration number: Status: Registration expiry date:	MED000 Registered 30/09/2015	Notations: Conditions:	No No
Dr Adriaan Johannes Smith Profession: Medical Practit Registration number:	oner MED000 Registered 30/09/2015 Rockhampton	Notations: Conditions: Undertakings:	No No No
Dr Adriaan Johannes Smith Profession: Medical Practit Registration number: Status: Registration expiry date:	MED000 Registered 30/09/2015	Notations: Conditions:	No No

Figure 10 Internet search on doctor details Australia

View Details

Canada	http://www.cpso.on.ca/Public-Register/All-Doctors-Search
New Zealand	https://www.mcnz.org.nz
United Kingdor	m http://www.gmc-uk.org/doctors/register/LRMP.asp

Figure 11 Other country doctor search look-ups

EDRS - Entering in a deceased

Once the doctor or hacker has logged onto the Electronic Death Registration System, it is a simple task to register a new death registration. Details required for the deceased details include

- Name of the Victim
- Sex
- Age
- Current Residence
- Social Security Number or Tax file number
- Next of Kin
- Birth Place
- Marital Status
- Surviving spouse's name
- Mother and Father
- Place of Death
- Time of Death
- (And the most important) Cause of Death.

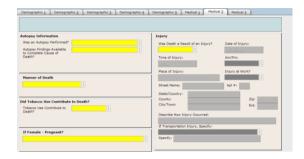


Figure 12 Doctor filling out a Certificate of Death using EDRS

Cause of Death - Coroner or not

A doctor has certain rules to follow, as discussed previously, in regards to if they call in the Coroner or Medical Examiner "ME". These rules include, if the patient has died suddenly, unnaturally, in a hospital, in a prison, out in the public or in suspicious circumstances, a Coroner must be called in to investigate or complete the Death Registration. However, if the patient was in a doctor's long-term care, was terminal and died at home, there is no requirement for the coroner. A Medical examiner can be a doctor who has had pathology or forensic training. A Coroner however is elected into the role, represents the Crown and may not have the same extensive training as the Medical Examiner.

Hackers choice

A hacker or pretend doctor killing a person digitally will tick the box, no Coroner or Medical Examiner is required, and then take care of the problem. The last thing a hacker would want is the additional step of a coroner's report; this would be problematic, so the malicious person would stick to the 'rules' and select a 'Natural Death' which also does not require the police. These 'rules' being: do not let your victim die in an accident; alone; or suddenly, as any death may arise suspicion. (The best deaths are the ones where the doctor has been looking after the patient for some time, there are signs of a heart attack or pneumonia, and of course, dying at home). Cancer is always a good choice, something you would see in palliative care.

TIP: This is a flag for law enforcement generated by using EDRS mortality surveillance. Look for common deaths by the same physicians.

For a death like a suicide or an accident, tobacco or drug related or even a sudden heart attack, the government collects this data and

it is used by government agencies to target these areas of death. The government will increase awareness and prevention. In the U.S. this group is called, 'Vital Statistics Registrations'. Filling out a death registration for a non-doctor, such as a hacker, can be quite difficult. Luckily there are guides on how to do this online that illustrate the type of information that is required. You cannot just say the victim had a 'heart attack', you must fill in the form using terminology a Doctor would use (Doctor's Speak). Words such as the patient was suffering from Hepatocellular Carcinoma who then had acute hepatic failure, deep venous thrombosis and died of a Pulmonary Embolism. That's doctor language for the patient had liver cancer, their liver failed, they got a blood clot and the clot got stuck in their lung and they died.

Sample of the Cause of Death "Doctor Speak" can be seen in Figure
13 and details are online in the Medical Examiners' and Coroners
Handbook on Death Registration and Fetal Death Reporting 2003
revision- How to quide from the United States.

CAUSE OF DEATH (See instructions and examples) 2. PART I. Enter the <u>that not events</u> —dispasses, injuries, or complications—that directly coupsed the death. DO NOT enter terminal events such as cardiac surrest, respiratory arrest, or vertrioular fortilation without showing the addoxy. DO NOT ABBREVIATE. Enter only one cause on a fine. Add additional lines if recessary.						
IMMEDIATE CAUSE (Final disease o condition and the state of the state						
Sequentially list conditions,	b. Deep venuous thrombosis in left thigh	3 days				
Tany, ilauryo ihe dasse Dueto (or as a consequence of): Back on line a. Emerche UNDRIVING CAUSE Cause of the consequence of): Cause hepasic failure Cause or her yout to the consequence of):						
initiated the levents resulting in death) LAST	initiated the levents resulting					
PART II. Enter other significant	of contributing to death but not resulting in the underlying cause given in PART I. 33. WAS AN AUTOPSY PERFO	PME0?				
	□ Yes 10 No					
	34. WERE AUTORSY FINDINGS AVAILABLE Y THE CAUSE OF DEATHY — Yes 8 Mo					
35. DID TOBACCO USE CON DEATH? Ves Probably No & Unknown	□ Not pregnant writin past yeer □ Pragnant al time of death □ Not pregnant, but pregnant within 42 days of death □ Not pregnant, but pregnant within 42 days of death	ATH emicide anding investigation ruld not be determined				

Figure 13 Certificate of Death using EDRS with a Cause of Death

Cause of death reasoning

The Cause of Death section that must be completed by the doctor, medical examiner or coroner, follows guidelines recommended by the World Health Organization. An important feature is the reported underlying cause of death determined by the medical examiner or coroner and defined as (a) the disease or injury that initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence that produced the fatal injury. In addition to the underlying cause of death, this section provides for reporting the entire sequence of events leading to death as well as other conditions that significantly contributed.

Using MCCD for Australian deaths

In Australia, the Medical Certificate of Cause of Death (MCCD) is also online like the U.S. Electronic Death Registration System. However it is not protected by a portal. This publicly accessible form can be accessed by anyone on the Internet. The only thing protecting the system from malicious activity is the Doctor's Name, and Registration/License Number. Notice in Figure 14 the form only displays the entry points for the doctor's name, registration number, and suburb.



Figure 14 Australia's Medical Certificate of Cause of Death Online Portal

https://onform.com.au/content/dam/onform/VictorianRegistryOfBirthsDeaths
AndMarriages/forms/VIC_BDM_MCCD_v2.41.pdf

A hacker must match the government central records before the form can be viewed completely. To get these details, the hacker simply goes to the registered doctor online search facility at http://www.aphra.gov.au and enters in a doctor's surname. The database will search all doctors and display the doctor's last name, first name, medical license number, address and postcode - all the details required to fill in the full form of the Medical Certificate of Cause of Death as shown in Figure 15.

* 1. Is this death a rep	ortable or revie	wable death in	accordanc	e with sect	ions 10 or	13 of the Corone	ers Act 2008?
Yes • 1	No						
Note: A			reportable' death includes one resulting from a fracture or head injury. For definitions of reportable and reviewable deaths.				
* 2. Did you examine t	he deceased's	body after deat	th ?	Yes	O No	*Date of examina	ation
* 3. Were you respons deceased immedia		e to the	Yes	○ No	*Date last seen a	e.g dd/mm/yyyy alive by you e.g dd/mm/yyyy	
PART TWO - Dece	ased's Detail	s					
* 5. Surname (family r	name)	* (6. Given na	me(s)			
* 7. Date of death	e.g dd/mm/yyyy		* 8. Date o	f birth	e.g dd/mm	/yyyy	
* 9. Sex of deceased	Male (Female					

Figure 15 Australia's Medical Certificate of Cause of Death Online Portal

Once the doctor's details have been submitted, the doctor or hacker is free to fill in and submit the Medical Certificate of Cause

of Death to the Births, Deaths and Marriages government department. They can also print/send a copy to the funeral director to complete Phase 2 of the death process.

Australian coroner deaths

Note: In Australia a coroner will be involved in the death if the deceased falls into one of two categories. The first being "reportable" - if the deceased died under suspicious circumstances, died suddenly, in custody or in a hospital. There is another situation called a "reviewable' death, where the death is of a second or subsequent child to a parent. This is an important piece of information for when we look into the baby harvesting principle. Reviewable deaths are to capture a mother or father who are abusing children within the home. A flow chart can be seen in Figure 16.

TIP: Beware of harvesting multiple children within the one family or you may appear on the radar as a reviewable death.

Determining Whether a Death is Reportable or Reviewable When to prepare a death certificate When to report to the coroner Where the death is not reportable to the coroner the registered If the death is a reportable or a reviewable death, a medical practitioner or any person medical practitioner should prepare one of the following forms to must report the death to the coroner provide to the Registrar of Births, Deaths and Marriages • Medical Certificate of Cause of Death (MCCD 28+) of a person aged 28 days or over Obligation to report reportable & reviewable deaths Medical Certificate of Cause of Perinatal Death (MCCD Perinatal) used in relation to a death of a child aged less than 28 days or a A registered medical practitioner who is present at or after the death of a person must report the death without delay to a coroner if the death is a reportable death. etill_bieth Who is authorised to complete the certificate? (20 Penalty Units*) A medical practitioner who was responsible for a person's medical care immediately before the death or who examines the body of a A registered medical practitioner who is present at or after the death of a child (being the death of a second or subsequent child of a parent) must report the death without delay deceased person after death. The form must be submitted to the to the State Coroner if the death is a reviewable death (20 Penalty Units*) If there are two or more medical practitioners present at or after a death and Registry of Births, Deaths & Marriages within 48 hours of the death. them reports the death, the other practitioners need not report the death. Any person who has reasonable grounds to believe that a reportable or review. e note: It is an offence to complete a medical certificate if the death should be reported to the coroner. (12 Penalty Units*) has not been reported must report it without delay. (20 Penalty Units*) *One Penalty Unit = \$122.14 (as of 1/7/2011) What is a reportable death? What is a reviewable A death is 'reportable' if the death is connected with Victoria and comes within one of the following categories. death? A death is 'reviewable' if it is the death of <u>a second or subsequent</u> Categories of reportable deaths child of a parent. (Please refer to section 4 of the Coroners Act 2008 - for a complete listing) Where the deceased was: Where the death Where the Where the death occurs during a medical A death will not be considered held in care e.g. in the care of appears to have procedure1, or following a medical procedure 'reviewable' if: person's which is causally linked to the death (Criteria Dept. of Health / DHS . identity • the death occurs in a hospital held in custody or in the process unexpected One) AND a medical practitioner would not and of being detained unnatural or unkno immediately before the procedure w the child was born at a hospital and has always been an 'in patient' of a hospital and · admitted or committed to an violent or to undertaken, have reasonably expected the death have resulted, assessment centre for treatment (Criteria Two). or the person was a mental directly or the death is not a reportable indirectly, from health patient in an 'approved ¹ Medical procedure means a procedure mental health service within the accident or An 'in-patient' of a hospital performed by or under the general supervision of a medical practitioner and includes imaging, meaning of the Mental Health injury. includes a child whose only period spent outside a hospital internal examination and surgical procedure was during a transfer from one hospital to another. In determining whether the death meets Criteria Includes: One, the medical practitioner should consider t All homicides, suicides and accidental deaths, e.g. workplace following questions: and road accidents, falls and fractures. Would the person have died at about the same Deaths are reportable under this category even if there is time if the medical procedure was not prolonged interval between the incident and death. undertaken? Was the medical procedure necessary for the person's recovery? 'Natural' death, for example: carcinoma of the lung resulting If 'no' to any of the above (and the death meets criteri from tobacco abuse; cirrhosis of the liver as a result of alcohol abuse: etc. In determining whether the death meets Criteria Septicaemia and toxaemia unless caused by an unnatural Two, the medical practitioner should consider the event, i.e. an injury or trauma following question: . Before the medical procedure was performed,

Figure 16 Australian Coroner Reportable Vs Reviewable Death Flow Chart

The vulnerabilities in the process "The Funeral Director"

As previously discussed, once the doctor has completed the Certificate of Death (U.S.) or Medical Certificate of Cause of Death (AUS) the role is then transferred to the Funeral Director to perform the service and dispose of the body. In most countries the Funeral Director by law has to organize body disposal within 7 days. The Funeral Director will pick up where the doctor left off, applying for burial permits, double checking the doctor's details and putting in next of kin details.

Just use EDRS make it easy

The process of using the Electronic Death Registration System fraudulently for doctors could also be repeated for the Funeral Director in using the United States' EDRS. It is virtually the same method, but in this case instead of picking 'I am a Physician' for the self-service registration, I select "I am a Mortuary Practitioner" for disposing of the virtual body, as shown in Figure 17. For states that

have no DIY self-registering portal a downloadable form is available for all states which can be emailed or faxed in. All the hacker needs to do, is fill out the details of the funeral home but put in a burner cell number and email address for username/password verification details. Funeral directors and funeral home licensing details are publicly available online for all states. The next of kin can check to see whether a funeral director is licensed or not using this searchable database. A hacker can also this intelligence about funeral directors to fill out the application to use EDRS.



Figure 17 Electronic Death Registration System Registration Funeral Director

VIRGINIA DEPARTMENT OF HEALTH – DIVISION OF VITAL RECORDS VIRGINIA VITAL EVENTS AND SCREENING TRACKING SYSTEM (VVESTS) ELECTRONIC DEATH REGISTRATION SYSTEM (EDRS) FUNERAL HOME USER LOGON REQUEST FORM

NAME: L	ast		First_		Middle		
User ID:		Phone#:		Email:			
FUNERA	L HOME NAME:						
Address	:		City		State	Zip Code	
(Access v	vill be associated	with this address/fac	lity ONL Address				
Funeral H	lome Staff / Dire	ector			Date:		
License I	No. # (If Director):		License Ex	piration Date:		

Figure 18 Paper base EDRS registration for Virginia

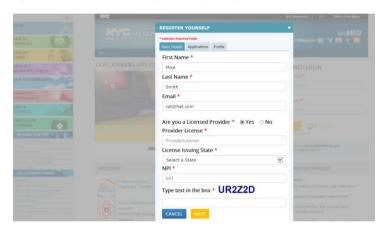


Figure 19 Online ERDS registration for New York

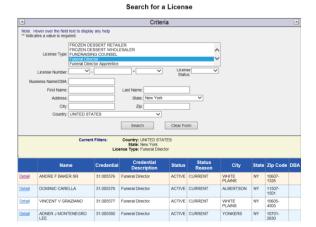


Figure 20 Funeral Director License database containing required details

I wanted to be a Funeral Director

However, my research took me down a different path to determine how easy it would be to become a real Funeral Director in Australia, the U.S. and the United Kingdom. This research would give me the chance to investigate the funeral business, licensing requirements and a closer look at the online death portals. I started my research close to home in Australia. I had always been interested in becoming a legitimate funeral director anyway to offer an online service to cut the costs of an expensive funeral so it was dual purpose.

Becoming a Funeral Director in Australia

For obvious reasons, I didn't want to hire a building and deck it out like a funeral home, because that costs a lot of money and I wanted to see if this could be repeated by anyone quickly and cheaply. I wanted it to look as legitimate as possible but feasible to anyone. I registered a domain name called Kustodianfunerals.com for \$10. I then set up a funeral director website with flowers and caskets using stock photos and some photo shopping of where I had

completed an apprenticeship under a South Korean propaganda wing.



Figure 21 Funerals website with caskets and flowers



Figure 22 Picture of me in a suit next to a hearse



Figure 23 South Korean Photo 'chopping"

Funeral Director paperwork

In the United States the traditional paper-based "Certificate of Death" is one document. It is completed by the doctor and then the funeral director adds their relevant sections to the document, including verifying the doctor's details and adding where the body is buried, for example.

In Australia, however, the traditional paperwork submission is actually two separate documents. The doctor fills in the Medical Certificate of Cause of Death which is signed and handed to the funeral director. The funeral director fills in a new document called

the Death Registration Statement. The Funeral Director cannot dispose of the body until they have received the signed Medical Certificate of Cause of Death from the doctor. This is for obvious reasons; you do not want the funeral director cremating the body before the Coroner gets a chance to investigate the cause of death, if required.

DRS in detail

I initially focused my research on the paper-based systems that funeral directors have been using for the past decades. In Australia, the online funeral director portal is a new development and some funeral homes still use the old paper-based system called the Death Registration Statement "DRS". The Death Registration Statement is similar to the Medical Certificate of Cause of Death certificate but instead of the cause of death, it covers where the person is buried, what cemetery, plot number or cremation details and details about the next-of-kin. The Death Registration Statement will include details such as:

- Name of the Victim
- Sex
- Age
- Current Residence
- Next of Kin / Serving members
- Birth Place
- Marital Status
- Surviving spouse's name
- Mother and Father
- Place of Death

All of these details will ensure the Births, Deaths and Marriages department (registrar) has accurate data and also will assist future Genealogy searches. Figure 24 shows the traditional paper-based Death Registration Statement document.

PART ONE - DEATH REGISTRATION	
Step 1 - Deceased's Details	
1. Sumame (family name)	8. Was the deceased born in Australia?
	Yes - Please specify place of birth
2. Given name(s)	Suburb/Town
	State
3. Date of death DD/MM/YYYY	No - Please specify the place of birth
4. Date of birth	Suburb/Town
5. Sex of deceased Male Female	Country
6. Age at death Years OR Months	
7. Place of death	
a) Name of place/institution	9. For how long did the deCeaSed live in Australia?
	Since birth OR Years Months
	10. Deceased's residential address
b) Street no.	a) Street no.
and name	and name
c) Suburb/	b) Suburb/
Town	Town
d) State e) Postcode	c) State d) Postcode
11. Usual occupation during working life	*13. Was the deceased a pensioner?
Note. Usual occupation may include accountant, mechanic, doctor,	*14. Was the deceased of Australian Aboriginal
home duties or teacher.	or Torres Strait Islander origin?
	Yes - Please specify origin
*12. Was the deceased retired?	Aboriginal Torres Strait Islander Both
Step 2 - Marital Status of the Deceased	
15. What was the marital Status of the deceased at time of death?	
Married Widowed Never married	Divorced Unknown
If previously married, please list all marriages of the deceased (starting	g with the first marriage):
Note If more than three marriages, attach a separate sheet with the req	urired details.
Mark 'U/K' where details are unknown.	and details.
1. Given name of SpouSe:	
Surname of SpouSe (family name at time of marriage):	
Place of marriage - Suburb/Town:	State:
Country (if outside Australia):	Deceased's age at time of marriage years

Figure 24 Death Registration Statement, hard copy in Australia

Online death registration Australian application

The Death Registration Statement document in Australia, as previously discussed, is now available online. I then investigated getting access to this portal. I sent off an online application to become a Funeral Director without having any licenses or qualifications. I entered my name, business name and email details. I could have entered fake information with an anonymous email, but as stated previously, I was interested in becoming a real funeral director for this research.

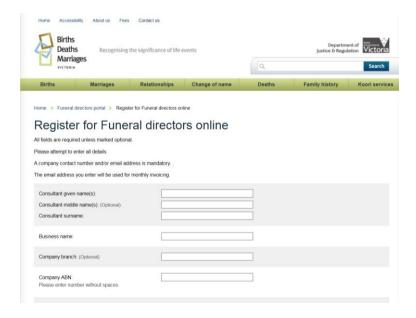


Figure 25 Online Application for Registering as a Funeral Director

Approval to submit deaths

After submitting the application within 5 days, with no follow up phone call, email or any scrutinizing, I received a welcome to the online Funeral Director portal registration. The online portal was a replacement for the Death Registration Statement. Using these credentials I could now complete Phase 2 of the death registration process and complete the 'killing' of someone. I could now take the role as a funeral director.



Figure 26 Portal credentials for the Funeral Director DRS statement online

Now I am in the death business

I could now fulfil my lifelong dream of becoming a funeral director.

I could now dispose of those bodies piling up in the backyard. I logged onto the funeral directors portal with my new credentials so I could now register a death or burial. I could register a single death or upload a bulk death registration, or bury multiple people at once, allowing me to be a mass murderer, as shown in Figure 27.



Figure 27 Funeral Director online portal Death Registration

The portal was very simple to use; details such as the deceased's name, address, next of kin, where the body was disposed, and whether it was cremated or buried. Once I had completed all the sections, the document could then be submitted as shown in Figure 28.

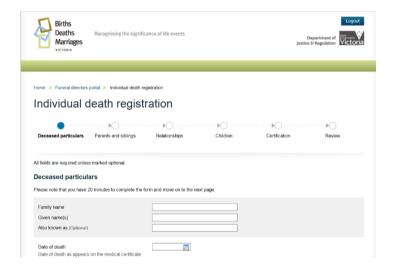


Figure 28 Death Registration online portal particulars.

BDM or Registrars role

Once the Death Registration Statement is submitted by the funeral director to the Government Department in Australia, "Births, Deaths and Marriages" (registrar), the government can issue a Death Certificate to the next of kin.

The registrar now has a copy of both the Medical Certificate of Cause of Death which was submitted by the doctor and has a copy of the Death Registration Statement from the Funeral Director.

These two documents are all that is required for the Government to produce the Death Certificate, and your victim is now officially dead.

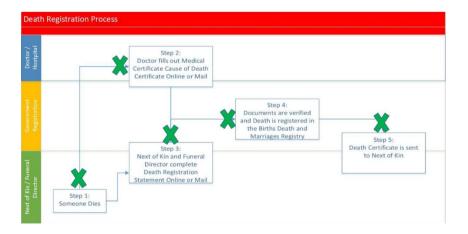


Figure 29 Death Registration Process with all phases complete

United Kingdom Funeral Director

Having found the Australian system for Funeral Director licensing and portal requirements quite lax, I then investigated other parts of the word. In the United Kingdom, as seen in Figure 30, there are no licensing requirements to become a Funeral Director. To register a death in the UK was just as simple.

Welcome to the British Institute of Funeral Directors

It is a little known - and quite shocking - fact that anyone in the UK can set themselves up as a Funeral Director without any previous experience, training or qualifications. No licence is necessary.

The British Institute of Funeral Directors (BIFD) is aiming to end this state of affairs. We are the preeminent provider of education within the funeral profession; all BIFD members have achieved an appropriate level of professional training, and our Licence to Practice is only granted to professionals who follow the Institute's requirements for annual Continuous Professional Development.

Choose a BIFD member

By choosing a funeral professional who is a member of the British Institute of Funeral Directors, you can be certain that you are choosing a competent and qualified practitioner - the best qualified professional in your

Joining the BIFD

For funeral professionals, membership of the BIFD is a reassurance to your clients of your training and ongoing commitment to providing the best quality service.

BIFD training courses are accredited with the University of Greenwich, gaining 60 Credits at Level 4 (the highest level for this type of course). These are the only funeral profession training courses in the UK whose credits can be used towards a full degree course, either at the University of Greenwich or one of their partner Universities.

Information on becoming a member can be found here:

Joining the BIFD

and information on BIFD training programmes is here:

Education & Training

Figure 30 Funeral Director Licensing Requirements in the United Kingdom

United States Funeral Director

I then turned my attention to the United States licensing requirements for funeral directors. As previously stated, I chose not to use the do-it-yourself (DIY) Electronic Death Registration System portals fraudulently. But if a hacker wanted to do it this way, it was simple, just select I am a Mortuary Practitioner and use fraudulent credentials.

My research into the United States funeral director licensing system discovered it had more stringent requirements than the Australian and UK requirements. But that is not saying much considering the UK and Australia requirements had nothing at all.

In the United States, the funeral director licensing requirements were different in every state. In Colorado, you needed no qualifications at all, but in California you need to hold an Arts degree or equivalent to become a funeral director. In some states you needed to hold a diploma in being a funeral director and there were online courses on becoming an embalmer as well. Some

states required you to do an apprenticeship under an existing funeral home.

California Cemetery & Funeral Bureau 1625 N. Market Blvd, Ste. S-208

Sacramento, CA 95834-1924 Phone: 916-574-7870 Fax: 916-928-7988 Email: emailcfb@dca.ca.gov

Web: www.cfb.ca.gov

Type of Educational Continuing Education Apprenticeship License Requirements Requirements Embalmer High school plus a No CE requirements Two years before, during or after mortuary degree in Mortuary Science college Funeral Director Associate of Arts or No CE requirements equivalent (any subject)

Colorado Funeral Directors Association (CFDA)

P.O. Box 631664

Highlands Ranch, CO 80163-1664

Phone: 303-791-2336
Fax: 303-395-2609
Email: cfda@ascentmeetings.com
Web: www.cofda.org

Continuing Education Apprenticeship Type of Educational Requirements Requirements Embalmer No current licensing No CE requirements Contact the Colorado requirements; however, FDA at www.cofda.org active voluntary for more information certification program Funeral Director No current licensing No CE requirements Contact the Colorado requirements; however, FDA at www.cofda.org active voluntary for more information certification program

Figure 31 Electronic Death Registration System Registration U.S. States

To be licensed in Nevada you need to pay \$375 and sit an exam to become a funeral director. I have included an example of an exam question for the Nevada funeral director licensing. Questions such as

"The Religion of the United States is mainly"

- a) Muslim
- b) Hindu
- c) Buddhist
- d) Judeo Christian (I think I would select this answer)

The easiest way to become a registered Funeral Director is in a state such as Colorado and use the Electronic Death Registration System legitimately to complete the second phase of the death registration. If the local states funeral director licensing is too difficult and you really don't have the time to get an Arts degree and you want to bury some bodies, I suggest you just use EDRS fraudulently.

U.S. STANDARD CERTIFICATE OF DEATH

LOCAL FILE NO.									STATE FILE NO.			
	§								2. SEX Male	3. SOCIAL SE 123-	CURITY NUMBER 45-6789	
	4a. AGE-Last Birthday (Years) 92					5. (M	5. DATE OF BIRTH (Mo/DayYr)		6. BIRYHPLACE (City and State		ate or Foreign Country)	
	l								San Francisco, CA			
-						Thurmont						
- 1					7e. APT. NO. 71, Z			7f. ZIP CODE	CODE 7g. INSIDE CITY LMITS?			
To Be Completed/Verified By: FUNERAL DIRECTOR		IC AT TIME OF DEATH			100 81100					☐Yes \$ No		
	ACTUENT CONSTRUCT				dowed						nagej	
	11. FATHER'S NAME (First Middle, Last) Stanley Leonard Palmer					12. MOTHER'S NAME PRICE TO FIRST MARRIAGE (First, Middle, Last) Lorraine Ellen Russell						
		1	1			13c, MAILING ADDRESS (Street and Number, City, State, Zip Code) 245 Lone View Road, Thurmont, MD 20212-1234						
	Shella Marie Palmer	Wife										
E 2										1		
2	15. FACILITY NAME (Hinot institution, give street & number) 16. CITY OH TOWN, STATE, AN						ATE, AND	2IP CODE	ty u passoe	nishome il Other (SPECRY): 17. COUNTY OF DEATH	
	Mountain Memorial Hospital Frederick										Frederick	
	18. METHOD OF DISPOSITION: #Bunsl DiCremation 19. PLACE: Diponation = Enternament = Removel from State											
	, , , , , , , , , , , , , , , , , , , ,											
	22. SIGNATURE OF FUNERAL SERVICE LICENSEE OR OTHER AGENT Robert J. Boone								23. LICENSE NUMBER (Of Licensee) 2569114			
						NOUNCED DEAD (Mo/Day/Yr)				25. TIME PRONOUNCED DEAD 0310		
	WHO PHONOUNCES ON CERTIFIES DEATH											
EB Si	Julia R. Kovar, M.D.											
ᄝᄄ										1. WAS MEDICAL EXAMINER OR		
EE										CORONER CONTACTED? © Yes MINo		
e Com	Approximate interval: 2. PART I. Enter the gharn of swelte-diseases, injuries, correctance-the dataset, section and examples) 3. PART I. Enter the gharn of swelte-diseases, injuries, correctance-the disease, section the data. Do NOT exter terminal creats such as cardiac project inscriptions of the cardiac project indicates and increases and injuries. Control of the cardiac project indicates and injuries											
8 G	IMMEDIATE CAUSE (Final									Minutes		
- 2	resulting in death) Due to (or as a consequence of):											
	Sequentially lift conditions, b. <u>COTIGESTIVE REST TAILUTE</u> Larry, Badding to the cause liber on line a. Enter the									_4 days		
	UNDERLYING CAUSE c. Acute myocardial infarction (disease or injury that Due to (or as a consequence of):										_7 days	
	in death) LAST d. Chronic ischemic heart disease										8 years	
	PART II. Enter other gignificant conditions contributing to death but not resulting in the underlying cause given in PART 1. 33. WAS AN AUTOPSY PERFORM										FORMED?	
	Diabetes mellitus, Hypertension								a. we	□ Yes 28 No	100 11111 100 0 100	
									COMPLI	ETÉ THE CAUSE OF	DEATH? Diges # No	
	35. DID TOBACCO USE CONTRIBUTE TO 36. IF FEMALE:							37. M	ANNER OF D	EATH		
	UEA INT											
	C Var C Probable		□ Preg	nant at time	of death				Natural C) H	famicide:		
	☐ Yes ☐ Probably		□ Net ;	wegnant, bu	of death it pregnant with it pregnant 43 d			0.		famicide Pending Investigation		
	To Be Completed By: MEDICAL CERTIFIER FUNERAL DIRECTOR	TO THE STATE OF TH	DESCRIPTS LEGAL TAME INSURANCE PROSERVE PROPRIETOR OF CONTRIBUTION OF CONTRIBU	DESCRIPTS LEGAL TAME STAGE AND PROPERTY OF THE	DECEMBERS SECRET RATE MANY INSULAN PARKS AND STATES DECEMBERS SECRET RATE MANY INSULAN PARKS AND STATES A RESERVATOR STATE MANY INSULAN PARKS AND STATES A RESERVATOR STATE MANY INSULAND A RESERVATOR STATES AND STATES	DECEMBERS LEARN RAME INSULAN MANUEL AND	DECEMBERS SERVICE NAME "Instance Areas a any (Prince Modals, Last) INCOMENS DEPTH AND ADDRESS OF THE SERVICE	DECEMBERS LEGIS ANDE PINSUA MASS STORY OFFER MIGHS LEAD LEGISLATION LOOPING PERSON APPLICATION LOOPING PERSON MARYLAND 25 ANDELSE BENEARY MARYLAND 26 Loop Story MARYLAND 27 A RESERVANCE PLANT AND STORY 28 ANDELSE AND LIVERED 28 ANDELSE AND LIVERED 29 LOUPING MARYLAND 28 STEEPS AND LIVERED 29 LOUPING MARYLAND 29 STEEPS AND LIVERED 20 LOUPING MARYLAND MARYL	DECEMBERS LEARN NAME SHALLOW AND STATE OF BRATH LEARN NAME SHALLOW AND STATE OF BRATH LEARN NAME SHALLOW AND STATE OF BRATH APPEARS OCCURREDING A COMPANY AND STATE PROMOTE OF BRATH OCCURREDING A COMPANY AND STATE PROMOTE OF BRATH NAME SHALLOW AND STATE PROMOTE OCCURREDING A COMPANY AND STATE PROMOTE OCCURREDING AND STATE OCCURREDING AND STATE OCCURREDING AND STATE OCCURREDING AND STATE OCCURREDIN	DECEMBERS LEASH NAME TRADEAR AS A 1971 (FIRE Medide Leas) 1 EXCERT SETTING NAME TRADEAR AS A 1971 (FIRE Medide Leas) 2 STATE AND NAME TO A 1971 (FIRE Medide Leas) 2 STATE AND NAME TO A 1971 (FIRE Medide Leas) 2 STATE AND NAME TO A 1971 (FIRE Medide Leas) 2 STATE AND NAME TO A 1971 (FIRE Medide Leas) 2 STATE AND NAME TO A 1971 (FIRE Medide Leas) 3 STATE AND NAME TO A 1971 (FIRE Medide Leas) 3 STATE AND NAME TO A 1971 (FIRE Medide Leas) 3 STATE AND NAME TO A 1971 (FIRE Medide Leas) 3 STATE AND NAME TO A 1971 (FIRE Medide Leas) 4 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE Medide Leas) 5 STATE AND NAME TO A 1971 (FIRE MEDICE LEASE AND NAME TO A 1971 (FIRE MEDICAL LEASE AND NAME TO A 1971 (FIRE MEDI	DECEMBERS LEGIS AND LIGHT LIGHT AND LIGHT CONTROL AND LIGHT CONTROL LIGH	

Figure 32 Abstract of a Death Certificate

The vulnerabilities in the process "The Executor"

The executor of a will is required to shut down the deceased's bank accounts, pay out any debts, notify the TAX/IRS department and settle any properties and disperse the remaining funds as laid out in the Last Will and Testament. The executor will need to notify

agencies such as the Department of Motor Vehicles (DMV), Life Insurance Companies of any policies, utilities and employment. Being an executor of a Will does take some time and must be done properly. Below are some of the things an Executor may have to do:

In the course of administering an estate, an executor will usually have to:

- 1. File an application for probate in most circumstances.
- 2. Determine what debts and liabilities need to be paid.
- 3. Assemble the assets which will be used to pay debts.
- 4. Work out the order that assets are to be used to pay debts.
 In some cases this will be set out in the Will, otherwise there
 are laws which tell you which assets to use first.
- 5. Lodge taxation returns for the deceased and for the estate.
- In some cases, arrange for documents to show that the executor is the legal owner of certain types of assets before these can be sold.

7. Distribute the assets to beneficiaries according to the terms of the Will

Not quite done yet

If you were malicious and virtually killed someone using the steps discussed and have then obtained the Death Certificate, you will need to become the executor of a will to obtain the victim's bank account balances and properties.

Creating a will

The first thing you will need to do is create a will for your victim and leave the money to whoever you choose. This can be done online for free or a low fee naming yourself as an executor. You will then need the last will and testament with a fake signature of the deceased and the death certificate you obtained earlier and apply for probate.

MAKE YOUR FREE Complete Will Nevada Make Document Learn more about Complete Will > LAST WILL AND TESTAMENT OF Wills and Codicils and declare this to be my Last Will and Testament ARTICLE 1 IDENTIFICATION OF FAMILY

and all references in titis Will to "my spouse" are references

Figure 33 Online Will kit

the signing of this Will.

Probate

This legalizes you as the executor and beneficiaries to receive the deceased's assets. Simply put, probate ensures the Last Will and Testament is the legal document that goes to the courts and details who is authorised to execute the contents of the will.

Probate can also be done online in Australia and the U.S and will take about 2-4 weeks before you can start shutting down your victim's estate. Figure 34 is an example I used using the United States online application, whilst Figure 35 shows the online process in NSW and Victoria to make online probate applications.

SUPERIOR COURT OF WASHINGTON FOR KING COUNTY

Jeff A Moss,

Jeff A Moss,

Deceased.

NO. 1224

PETITION FOR PROBATE OF WILL,
LETTERS OF ADMINISTRATION
WITH WILL ANNEXED, &
NONINTERVENTION POWERS
(RCW 11.28.110 & 11.68.011)

Chris Rock declares under penalty of perjury under the laws of the State of Washington that the following is true and correct to the best of his knowledge:

- 1. **Decedent.** Decedent died testate on August 1 2015, was then a resident of King County, Washington, and left property in this state subject to probate.
- 2. Will. Decedent's last Will dated July 1st, 2015 will be filed in these proceedings. Decedent signed the Will on that date while competent, and its subscribing witnesses are Mike Ross and Barnie Gumble, whose Affidavit is subscribed or attached to the Will.
- 3. **Personal Representative.** In the Will, Decedent nominated the following persons to act successively as his/her Personal Representative:

Nominee #1: Chris Rock

Nominee #2: Homer Simpson

Figure 34 Online application for probate in the U.S.



Figure 35 Online application for probate in New South Wales Australia

Reasons to kill someone

Financial

Why not kill yourself. You could enjoy your life insurance payout worth millions of dollars whilst you're alive. No more sinking your boat at sea, or hiding out in Mexico. Start again with a fist full of dollars and get yourself a new life and identification.

Kill your elderly parents to get access to their bank accounts and properties. A lot of us have elderly parents who may have sizable next eggs. We are normally required to wait till they expire to get their inheritance or become power of attorney when they have lost their minds. Why not kill them off now and use their bank accounts.

Revenge

For the ultimate revenge on your ex-wife/girlfriend/partner. They will be dead and not even know it. You could shut down their lives and take their assets or just obtain the death certificate. If you wait 3-5 years and they don't realize they are dead until the legal

statuary time expires, they can't legally be returned from the status of dead. A real zombie.

Your boss is an asshole. As their Executor, shut down their bank accounts, driver's license, phone plan, cable and utilities.

Hinder

Kill off your investigating detectives. Subpoena and indictments can't be issued by a dead person. Dead people find it difficult to travel when everything has been cancelled.

Kill your opposing lawyer, the judge or IRS audit officer to slow them down.

The Law and Death

Declared Legally Dead, as He Sat Before the Judge

By JOHN SCHWARTZ OCT. 11, 2013

Donald E. Miller Jr. is legally dead, an Ohio judge explained to Donald E. Miller Jr. this week in court.

The judge, Allan H. Davis of Hancock County Probate Court, had declared Mr. Miller dead in 1994, several years after he mysteriously disappeared, leaving thousands of dollars of child support unpaid. His ex-wife, Robin Miller, had requested the declaration at the time so that she could apply for Social Security benefits for their two daughters.

In fact, Mr. Miller, 61, had simply drifted away to work in Georgia and Florida, he told the judge on Monday in Findlay, Ohio. Now, he said, he wanted to apply for a driver's license and needed to reactivate his Social Security number.

The judge noted that Ohio law does not allow a declaration of death to be reversed after three years or more have passed.

"I don't know where that leaves you, but you're still deceased as far as the law is concerned," Judge Davis told Mr. Miller during the 30-minute hearing, according to The Courier, a newspaper in Findlay.

The newspaper called Mr. Miller "the most famous dead man alive."

In an interview, Judge Davis said that the case was decided "in strict conformity with Ohio law," but that it had led to "a bizarre set of circumstances."

He suggested that Mr. Miller's situation could lead the Ohio legislature to rethink the law. In the meantime, he said, Mr. Miller can appeal the decision or take the matter up with the Social Security Administration, which might have a different view of the law.

"Every time you think you've seen everything," the judge said, "something like this comes along." Ms. Miller's lawyer, James Hammer, opposed Mr. Miller's resurrection on the ground that Ms. Miller might have to return the several years of benefit payments she received for her daughters. "You just didn't want to open a Pandora's Box of possibly having to return the benefits," he said in an interview.

Ms. Miller, a nurse who cannot work because of a disability, said she was not trying to be vindictive toward her former husband, but could not afford to repay the money. She first learned that Miller was alive when he showed up in front of her home more than a year ago, sitting at a picnic table with his girlfriend. "I said, 'Oh, my gosh!' " recalled Ms. Miller, who has married again to a man whose surname is also Miller. "It was civil the whole time. We were both very nice."

Francis Marley, Mr. Miller's lawyer, said that his client, who is not giving interviews, probably could not afford to appeal the decision. He said that Mr. Miller simply wanted to be able to work with a valid Social Security number. "We hoped the judge would see the equity of giving his life back," he said. As for why his client, who told Judge Davis that he is an alcoholic, disappeared for so many

years, the lawyer said that "he was just — I guess you would call it a man-of-the-road, free-spirit type."

Had he ever encountered a case like this? "No," Mr. Marley said, "but I've only been practising for 43 years."

Figure 36 New York Times Article 2013

Overview

At the end of the last chapter, when discussing reasons on why you would kill someone off digitally, I raised the question about killing off your ex-partner for revenge but not telling them you did it, nor shutting down their bank accounts to alert them. What happens in 3-5 years when legally the decision can't be reversed? I sat down with a lawyer and asked him these sort of questions and what happens in the eyes of the law. What happens to contracts your partner enters into when they are legally dead, what happens if they marry but are virtually dead. I asked the lawyer to look at the U.S., Australian and British laws and the responses were quite entertaining. I think he thought I was an absolute psycho asking these questions. This chapter focuses on the law and death or presumption of death and how it will affect the hackers' victims.

Introduction to the presumption of death

Throughout history, legislature and judiciary have attempted to encapsulate all issues related to private and public life into a legal framework. Both technology and research is used to bring out aspects of the lives of all legal persons. However, some issues still remain a challenge to our legal structure. One such problem arises when people go missing for many years, sometimes forever. Such disappearances inevitably raise a variety of legal questions. One aspect, is what happens when someone goes missing and is declared legally dead whilst still living. How will legal matters that are related to his life get resolved? The question that especially requires discussion, is what happens when someone returns factually, while legally he/she was presumed dead? What happens to the matters which were resolved in their absence? What is the legal status of all those decisions which were taken under the presumption of his death? For the purpose of understanding the legal point, initially it is important to see what presumption of death is, its application and declaration, along with its revocation.

Once we understand this from a legal point of view we will manage to answer our questions and spot deficiencies in the legal system.

The examples of Donald Eugene Miller Jr²² and the character of Tom Hanks from the movie Castaway are different in the eyes of the law and can be resolved legally, which will later be discussed with respect to different jurisdictions.

When someone is missing, presumed dead and returns, Professor Jeanne Carriere termed it as "the living dead." In her article, she states those very questions which can create problems for a legal system, as she states:

The number of these "living dead" in the United States has been estimated at between 60,000 and 100,000. They create a morass of legal problems. Questions may arise concerning the security of transactions with the missing person's estate, such as the disposition of their land, the right to proceeds of insurance policies

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 $^{^{22}\,}http://www.nytimes.com/2013/10/12/us/declared-legally-dead-as-he-sat-before-the-judge.html?_r=0$

on his life and pensions, the right to a cause of action, the necessity of providing for dependents, the marital status of the spouse, the paternity and legitimacy of children of the spouse's second marriage, the conservation of his property from possible waste, the devolution of succession rights that would pass to him, the release of property from a life tenancy, the requirement of his consent to certain transactions, the merchantability of land titles from his estate, and claims of inheritance.²³

Disappearing without explanation does not necessarily have a lot of legal implications. It merely leaves matters in suspense. However, death, on the other hand, has all sorts of implications. Proving a missing person is dead isn't easy. In most cases, the burden is on the parties seeking relief. Usually the absent person's relatives must show that the disappeared is actually dead in order to get what they seek, for instance, insurance, money from bank accounts, property, remarriage, etc. In order to resolve such issues,

²³ I Jeanne Carriere, "The Rights of the Living Dead: Absent Persons in Civil Law," *Louisiana Law Review*.

the courts have developed "presumption of death" into their rules to handle long-term, unexplained absences.

Edgar Sentell²⁴ explains the presumption of death after an unexplained absence of seven years that was developed after 1800. Before this time, if there was no evidence to the contrary, an absent person was presumed to be living, even though he might have been missing for a century. Today, generally an absent person is presumed to have died if:

- he has been missing from his home or usual residence for a period of seven years;
- such absence has been continuous and without explanation;
- 3. persons most likely to hear from him have heard nothing;
- 4. He cannot be located by diligent search and inquiry.

²⁴ Sentell, Edgar, "The Missing Insured and the Life Insurance Death Claim", *FDCC Quarterly*, Winter 2004.

Now from here, the law on presumption of death under different jurisdictions will help us to realize what problems our question has asked and how they can be resolved, especially on the return of the missing person.

United States:

A number of American jurisdictions hold, in accordance with several English cases, now overruled, that, as there is a presumption of life till rebutted by the presumption of death, death must be presumed to have occurred at the end of the seventh year.²⁵ In early stages of presumption, its scope and historical evolution were stated in Eagle v. Emmet:

"...when there is no facts material to the solution of the question, except simply, absence without being heard of, then at the end of seven years the law presumes death. But still the point remains

²⁵ Donovan v. Major (1911) 253 III. 179 97 N.E. 231

open, when the death occurred whether at the beginning or at the end of the seven years, or at what other time..."

Later this took the form of US code 38 Section 108 which states the law quite similarly and explains presumption of death on a statute basis as:

- a) No state law providing for presumption of death shall be applicable to claims for benefits under laws administered by the Secretary.
- b) If evidence satisfactory to the Secretary is submitted establishing the continued and unexplained absence of any individual from that individual's home and family for seven or more years, and establishing that after diligent search no evidence of that individual's existence after the date of disappearance has been found or received, the death of such individual as of the date of the expiration of such period shall be considered as sufficiently proved.

According to Edgar Sentell,²⁶ almost all the states recognize the presumption, either by statute or judicial recognition of the common law rule. Some states amended their statutes to lower the seven-year period to five consecutive years, and a few reduced the period even more - Minnesota and Georgia cut theirs to four. Here's how it works. If you disappear, those interested can file a petition to have you declared dead. They'll need to prove it. If they do, your estate will be distributed as if you were deceased.

There are some constitutional limitations to these procedures as first of all a notice is to be served to the missing. It sounds a bit tricky but the law requires the notice to be served via newspaper or other modes. Finally, provision must be made for "adequate safeguards concerning property", in case the absent person shows up. Some states require those who receive the missing person's assets to return them if the person turns up alive.

²⁶ Sentell, Edgar, "The Missing Insured and the Life Insurance Death Claim," *FDCC Quarterly*.

The State of Nevada, for example, has a system that permits proceedings to be started after a person has been missing for three years. The absent person has a year to make an appearance. After that, the property can be distributed to the heirs permanently and his marriage will be dissolved.

Property

The decedent's property is administered by an executor of the will or administration of the estate just as in the case of other decedents. However, the executor or administrator may not make any distributions to beneficiaries except by court decree. The court, in awarding distribution, must require that there be a refunding bond, with or without security and in such form and amount as the court shall direct. The bond shall be conditioned that, if it shall later be established that the absentee was in fact alive at the time of distribution, the distributaries will return the property to the presumed deceased, or if it has been disposed of, will make restitution.

In your absence, the administrators of your estate will pay off your creditors and receive whatever compensation they would receive if you really were dead. If you possess secured debt (a mortgage or a car loan, for example), those debts will need to be paid or the creditors will reclaim the assets put up as collateral. California law²⁷ specifies a person who reappears after being presumed dead may recover any of his estate which has not been distributed, but property that has been distributed is only recoverable if it is "equitable under the circumstances", and not at all if five years has passed.

In Virginia, the code²⁸ provides property which has not been distributed and property which is in the hands of someone who received it as a result of the presumption of death shall be returned to the person presumed dead, but bona fide purchasers of estate property are allowed to keep it.

²⁷ Cal. Prob. Code § 12408

²⁸ Va. Code Ann. § 64.1-113

However Philadelphia code²⁹ requires that if a person is declared dead in whole or in part on the basis of his continued absence, then no property can be distributed out of his estate without the administrators posting a bond for the value of the property. New York doesn't seem to have a statute on this subject at all, meaning any property distributed because a person is presumed to have died could be pretty difficult to get back.

The marketability of the property of missing persons also becomes a problem. Where one has been absent from home for seven years without being heard from, a presumption arises that the absentee is dead.³⁰ But this presumption is always rebuttable. Accordingly, the rule would not aid in deciding the marketability of a given title.³¹ The commonly accepted principle is that if competent persons would have reasonable doubt concerning the vendor's title, a purchaser will not be compelled to accept a conveyance.³²

²⁹ 20 Pa.C.S. § 5703

³⁰ Stockbridge, Petitioner, I45 Mass. 5I7, I4 N. E. 928; In re Truman, 27 R. I. 209, 6i Atl. 598

³¹ Chew v. Tome, 93 Md. 244, 48 Atl. 70I. See 2i HARV. L. REV. 374

³² Pyrke v. Waddington, ITo Hare I; Close v. Stuyvesant, I32 III.

Marriage

Generally, in all jurisdictions, marriage or civil partnerships get dissolved when the court declares the presumption of death, so the question does not remain problematic at all as to what happens when the missing presumed dead returns. One can say the provisions are similar to the ones for the presumed decedent's property. Even though the absentee spouse, who is declared to be presumed dead is in fact alive, the marriage of the spouse is valid for all purposes as though the former marriage had been terminated by divorce.

Many state statutes provide a similar procedure for those who wish to remarry after their spouse has disappeared. For example, a South Carolina statute says:

"...the judge that such absent spouse has not been heard from for seven years the complaining spouse shall have an adjudication of the issue and such absent spouse shall be conclusively presumed dead in so far as any children or kindred resulting from any marriage of the abandoned spouse during such absence may be

concerned, notwithstanding the fact that such absent spouse may later appear alive. The reappearance or return of the absent spouse shall not alter such adjudication or invalidate or upset any subsequent marriage entered into by the abandoned spouse".

In all other jurisdictions, not only within US but in UK and Australia, the law on marriage and the state of civil partnership are much alike.

Life Insurance

According to C. Edgar Sentell,³³ the most difficult aspect of the problem of a missing insured is when the insurance company pays the amount of money due under the policy and the insured reappears. If the company pays the full death benefit and the insured thereafter reappears, the company will generally file a claim against the beneficiary usually on the grounds of mutual mistake of fact. When a comprehensive settlement has been made,

³³ Sentell, Edgar, 'The Missing insured and the life insurance death claim', FDCC Quarterly, vol. 54, no. 2.

however, the company may have much more difficulty in recovering the policy proceeds. To avoid any questions on this score, the company could obtain from the payee a repayment agreement at the time of making the settlement, or attempt to have such a provision incorporated in the decree, or there is litigation to establish the claim. A bond with an adequate surety is even more desirable from the insurance company's standpoint.

Some problems also arise in relation to insurance matters of the missing person. Problem of cancellation of contract by the insurance company is also a matter, as from when the person goes missing, there was no one to pay the premiums, and the law presumes death at the expiration of seven years and such presumption is not retroactive.³⁴ Another problem was when the defendant's contract of insurance expressly reserved the right to bind members by subsequently enacted by-laws. The society enacted a by-law to the effect that absence without

³⁴ Murphy v. Metropolitan Life Ins. Co. 155 N. Y. Supp. 1062. See Notes, p. 451

communication should never entitle a beneficiary to recover on the certificate, until the full term of the member's expectancy in life had expired, and provided up to such expiration premiums had been duly paid. The plaintiff, as beneficiary, after presenting proof of the insured's unexplained absence for over seven years, brought an action to recover on the certificate. Held, the plaintiff should recover, as the defendant could not impair the essential obligations of its contract without the consent of the insured.

The cases³⁵ are in conflict as to how far mutual benefit societies can change the contracts of insurance with their members by subsequently enacted by-laws, even where the power to amend is expressly reserved. In some states where the presumption of death from a long unexplained absence has been made statutory, it has been held that the society could not lawfully make a by-law that is inconsistent with the specific statutory provision.³⁶ The society cannot materially alter or nullify the essential obligations of its

³⁵ Haines v. Modern Woodmen of America (1920, Iowa) I78 N. W.

³⁶ Sovereign Camp v. Robinson (i9i6, Tex. Civ. App.)

contract.³⁷ A material element of the contract in the principal case was the right of the beneficiary to recover on proof of certain facts raising a presumption of death.

When the legally dead returns

The presumption of death can sometimes be rebutted. Sentell³⁸ says courts will consider evidence that the absent person was a fugitive from justice, had a bad relationship, was having money troubles, or had no family ties or connection to the community as reasons not to presume death.

A similar view of the Supreme Court of Louisiana pointed, in Sassman v. Aime,³⁹ to the regime of absent persons as a means by which the plaintiffs would preserve the rights of the absentee, whose death the law is presuming, in watching over and protecting his property for a number of years, in the hope, and expectation,

³⁷ Parks v. Supreme Circle (1914) 83 N. J. Eq. I3I, 89 Atl. io42

³⁸ Sentell, Edgar, "The Missing Insured and the Life Insurance Death Claim," *FDCC Quarterly*.

³⁹ 9 (9 Mart. (o.s.) 257 (La. 1821)

that he may again return. The motives which induced the legislator to thus guard the estate of absent persons, or of those who may disappear, are obvious, and this court feels that it is important to society that the law on this subject should be strictly and rigidly enforced.

Where the person who is presumed to be dead, according to academics,⁴⁰ there are three classes of cases which need to be segregated with respect to how the law protects the person who acts in reliance on the judgments of the presumption of death:

(1) The first is where the actual death of the absentee is a jurisdictional issue; here the judgment based upon the seven year presumption of death is utterly void, if the missing person was alive. It cannot alter the legal relations or immunities of the absentee, nor afford protection to anyone making payment in reliance upon it. However a state may provide by statute for the distribution of the estate of absentees, for in this event, absence for the required period, not death, is the jurisdictional.

⁴⁰ The Yale Law Journal, vol. 27, no. 7 (May, 1918), pp. 943-946.

Secondly, if death is not a jurisdictional fact, the judgment will protect one acting in reliance upon it against the claims of the absentee erroneously supposed to be dead. A typical example of cases falling within this second class may be where the decree of distribution entered in the administration of a decedent's estate. The administrator who makes payment in accordance with the decree is privileged to distribute the property even though an heir of the decedent was erroneously omitted from the distribution. Such a decree, though based on an erroneous finding of the death of an absent heir, is effective, until set aside, to change legal relations, because the court had jurisdiction of the subject matter and the notice by publication satisfies the requirements of due process in respect to all parties interested.

Lastly, the third class is different from the two above. Here the decree is inoperative for the person not present at that time. It is illustrated by a decision of the Supreme Court of Pennsylvania.

Maley v. Pennsylvania. 41 The defendant railroad was the depository

⁴¹ R. R. Co. (1917, Pa.) ioi Atl. 9ii

of an employee's savings fund payable upon the death of the depositor to his sons, or, if they were not living, to his legal representatives. The executrix (female executor) of a deceased depositor demanded payment of such a fund, the sons of the depositor having been absent and unheard of for some eighteen years. The trial court left to the jury the question whether the sons were dead, and on a verdict for the plaintiff, the court entered judgment. The defendant appealed on the ground that the judgment would not protect it from having to pay again to the sons, should they subsequently appear. The judgment was affirmed, with a dictum that it would fully protect the defendant against any future claim by the sons.

Australia

Unlike the USA, there is no particular statute which deals with the presumption of death. However, common law dictates as per the rule in this scenario. In Axon vs Axon⁴² where Dixon J states:

"if, at the time when the issue of whether a man is alive or dead must be judicially determined, at least seven years have elapsed since he was last seen or heard of by those who in the circumstances of the case would according to the common course of affairs be likely to receive communication from him or to have learned of his whereabouts, were he is living, then, in the absence of evidence to the contrary, it should be found that he is dead."

However, under Australian Law, presumption of seven years is rebuttable and death may be declared before seven years where it is established on balance of probabilities. As in Re Bennett,⁴³ evidence was shown that a diver disappeared after becoming disorientated during a dive off the coast of South Korea,

⁴² 1973 59 CLR 395

⁴³ 2006 QSC 250

a declaration of presumed death was made 2 years after the incident.

Administration of assets

Australian law has provisions which encapsulate the issue as how to administer the assets of the missing person. Section 54 of the Trustee and Guardianship act 2009, section 5A of the Guardianship and Administration act 1986 and section 8AA of the Guardianship and Management of property act 1991 treat the issue. These provisions allow for the appointment of an administrator to manage the affairs of a person, where this person is missing for ninety days and is not believed to have died. These arrangements have no effect on the civil status of the missing person, such as their married status, and do not amount to a declaration of presumed death.

The intention of these legislative provisions is to permit a limited use of property where there is a demonstrated need for decisions

to be made and it is in the best interests for an administrator to be appointed to make these decisions regarding the affairs of the person while the person remains missing. The appointment of an administrator is most likely to arise in situations where the person is missing without proof of death, but it could also be used even where death is virtually certain or probable, particularly if those left behind do not wish to obtain a declaration of death or presumed death. Also the people who are left behind are not required to wait for up to 7 years, before obtaining a presumption of death order.

When a person dies and they are not missing, i.e., presumption of death decree has been passed for them as they are missing for more than seven years, their assets become subject to the law of succession which permits their distribution.

Marriage and civil partnership

With respect to marriage or a civil partnership, both of them stand void when the death certificate has been issued in the missing person's favor.

Return of the presumed dead

Where a person is presumed to be dead shows up, there would be different aspects which need to be considered. With respect to his assets, section 14 of the Family provision act 1969 sets the rule. According to it this, the administrator would be appointed with the understanding that if the person who is presumed to be dead shows up, his estate would be reverted back to the person or the administrator may pay the amount equal to the value of property. Such provisions exist to protect the interests of the missing person. The section reads as:

The court may direct that the provision shall not be made unless the person in whose favor the order is made gives an undertaking or security that he or she will, if the grant of administration is revoked on the ground that the person was living at the time of the grant:

- (a) if he or she has received property other than money under the order restore the property or, at his or her option, pay an amount equal to the value of the property at the time he or she receives the property to the person whose death was presumed or, if that person has subsequently died, to the administrator of the estate of that person; or
- (b) if he or she has received money under the order—pay an amount equal to the amount of the money received by him or her under the order to the person whose death was presumed or, if that person has subsequently died, to the administrator of the estate of that person.

Australian law on marrying, while the person presumed dead is still alive, is not clear. However, it appears that if it is discovered that the missing spouse was in fact alive at the time of the second marriage, even where the spouse disappeared in circumstances

which led to a reasonable inference that he or she was dead, the second marriage is completely void and the marriage to the returned missing person remains in place.⁴⁴

England and Wales

However unlike Australia and United Sates, in the recent past under British jurisdiction there has been a statute-based development in this area of concern, effective from October, 2014 as Presumption of Death Act 2013 and its provisional proposal was basically drawn from the precedents used in other countries and that is why it comparatively has less deficiencies.

Presumption of death

In England and Wales, you can apply to the court for a missing person to be declared presumed dead. Provision states that the application for declaration of presumption of death can be made

⁴⁴ Lowe and Douglas 2007, *Bromley's Family Law*, 10th ed, Oxford.

where a person who is missing is thought to have died or has not been known to be alive for a period of at least seven years. ⁴⁵ It requires any loved ones or close relatives to apply to the High Court for the declaration that the missing person is presumed to be dead, which will be granted if the court is satisfied. ⁴⁶ Not only this, the court is also required to give a declaration related to date and time in order to discard any ambiguity and uncertainty for further upcoming matters. ⁴⁷ This is especially true in relation to questions related to insurance claims.

Effect of declaration related to property, Insurance, Civil matters

Section 3 is specifically related to our question which states that in pursuance of this declaration, this act is effective against all persons for all purposes, including the acquisition of an interest in any property,⁴⁸ which can resolve all matters related to civil aspects. Insurance will be given to the heirs, and also his will is

⁴⁵ Section 1 Presumption of Death Act 2013

⁴⁶ Section 2 Presumption of Death Act 2013

⁴⁷ Section 3 (1) (b)Presumption of Death Act 2013

⁴⁸ Section 3 (2) (a) Presumption of Death Act 2013

required to be executed once presumption is declared and the ending of the marriage or civil partnership to which the missing person is a party.⁴⁹ The marriage stands dissolved even if the presumed dead returns to life.

Hence, this declaration in England and Wales will enable any property, money and other possessions of the missing person to be administered and will dissolve the missing person's marriage or civil partnership. Subsequently, an appointed administrator will deal with any remaining civil matters. For the sake of our question it is important to note that this declaration under statute and its effects are not related to the matter whether he is alive or dead as long as he remains missing even after seven years. Courts do possess some other powers under section 4, on the basis of which courts, while making a declaration, may determine queries related to an interest in property.⁵⁰ Now we will move to the most technical moot point of this area, what happens after all of this has been administered in the absence of the missing person, his marriage has been

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⁴⁹ Section 3 (2) (b) Presumption of Death Act 2013

⁵⁰ Section 4 Presumption of Death Act 2013

dissolved, and his property has been sold due to family needs or distributed to his heirs?

What happens when the legally dead returns in England or Wales

This recently approved Act resolves such matters in the most logical manner as section 5 allows the court to declare a variation or revoke the declaration. The declaration order can be revoked on the return of the missing person or for any other reason that the court may think is strong enough to stand against the declared presumption of death.

The effect of this variation order does not affect an interest in property acquired as a result of a declaration, and it does not revive a marriage or civil partnership brought to an end by virtue of a declaration. The court may determine any question when making a variation order, which relates to an interest in property and arises as a result of the variation order. Hence, this keeps the statute open and flexible to any upcoming, unprecedented future problem like

⁵¹ Section 6 Presumption of Death Act 2013

what our basic question is concerned about. One of the provisions requires the court to direct the trustee of a trust affected by a declaration under this Act to as soon as reasonably practicable take out an insurance policy in respect of any claim which may arise by virtue of an order under section 7(2).

So, according to prevailing law in England, one needs to apply to the High Court for a Declaration of Presumed Death that the missing person has died, or has not been known to be alive for at least seven years. If the application is successful, the court will grant the declaration and notify the Registrar General of England and Wales, who will then enter the details into the Register of Presumed Deaths, and a Certificate of Presumed Death will be issued. This court declaration allows the family to apply for probate and ends any marriage or civil partnership of the missing person. The Certificate of Presumed Death can be used as evidence of death in the same way as a Death Certificate.

A development which is yet to come in England and Wales is a law which will enable the court to appoint a person to deal with the

property and affairs of the person if they have been missing for 90 or more days. It seems likely that a decision will need to be made regarding the property and affairs of the missing person, which means when the bill comes in it will affect the family or other persons who do not need to wait for a presumption of death order in order to resolve their related matters.

Conclusion

The question concerns a dead person getting into contracts, and by dead we mean wrongly declared dead or presumed dead. We need to distinguish between the two situations. One situation is concerned with the contracts made before the person went missing and is now presumed dead. The second situation concerns contracts made by the person while he was missing and is now presumed dead. As far as the first situation is concerned, when someone went missing the question arises as to what will happen to the contract to which that missing person was a party. Its answer depends on the kind of contract, if it was a contract for any kind of

services, it will be frustrating as generally contract law in most states works that way. Or if the contract was of any kind of sale/purchase it can be legally enforced provided the other requirements of the contract are complete.

However, the second situation requires a bit more elaboration. Here, a man makes a contract with someone while he was declared dead or presumed dead. In the first situation, the man was declared dead 'on paper' mistakenly or deliberately, while he was out there contracting with someone. In such a situation, we are required to see things rationally. When someone is dead on paper while he is out there buying a car, using a credit card or insurance or any other kind of civil matter he is involved in, those matters cannot be denied on the base of a mistake that he is dead on paper. Legal proceedings work practically. In such a situation he can contract and a contract against him can be enforced in a court of law. After all, he was declared dead mistakenly which is proved by his physical existence.

Whereas, in other situations, if someone is presumed dead in a

court of law after seven years and he is getting into a contract with someone somewhere else, the answer to the question is he can't take a plea that he is presumed dead and now no one can claim anything from him. This is a logical and policy-based answer. As logic says one can't obviously claim relief on the base of a fact that he is dead on paper, hence there is no contract. While the policy of commercial and contract law states that the innocent party bears no loss and "The sanctity of contract would therefore uphold such commercial transaction because the other party is innocent"

It is also important here to note down the general basic principal attached to presumption of death which states it is a rebuttable presumption. Hence any kind of factual existence of the person defeats the presumption automatically. Another important thing which one must kept in mind is that the presumption of death is not a tool for a missing person; however, it was formulated to make matters easy for the family of the missing person.

Now coming to our specific facts of the case of Donald Eugene; he was declared dead in 1994, but he showed up and filed a case in

2010 to reverse his presumption of death. Dismissing his claim, the judge held that 'you're still deceased as far as the law is concerned'. One of the reasons why the judge refused to reverse the previous finding was that the appeal against the previous decision was time barred. No matter how shocking the judgment was, Donald did not appeal the decision, however, legal jurisprudence dictates that the judge erred in interpreting the law as described above, given that the law in every jurisdiction recognizes the presumption of death and also accepts that this presumption is rebuttable.

Although his case was time barred, once it was proved that Donald was alive, the previous finding had no legal standing as it stands defeated. The simple rule of legal phenomenon dictates that where a structure is erected on a presumption, which is later rebutted, the structure collapses as the base was wrong. Hence if this case was appealed in the lower courts it would be decided differently. Hence one can say there are deficiencies as far as the law is concerned, but not in such a case when it was illogical to decide as such.

Lastly, the situation in Cast Away is a little different from the one we've been describing. When someone is exposed to "imminent peril" for example, a plane crash and fails to return, courts will generally assume the person was killed even though the usual presumptive death period hasn't elapsed. This also happened with the passengers of MH370 who were declared dead on 29 Jan 2015. Sentell states⁵² "the element of peril accelerates the presumption of death." This rule came into play after the attack on the World Trade Center. Expedited procedures were established for issuance of death certificates. As well as in the Australian case of Re Bennett⁵³ where after only two years the court declared the presumption of death. So whether we deal with a situation like Donald Miller or our character from Castaway, in both cases on the return of the missing person the presumption of death will be set aside by a variation order. Other matters related to property, marriage, and insurance will be dealt with according to the laws of

⁵² Sentell, Edgar, "The Missing Insured and the Life Insurance Death Claim," *FDCC Quarterly*.

^{53 2006} QSC 250

their jurisdictions, as stated above. However, as far as questions related to committing a crime are concerned it can only be a problem as long as on return of the legally dead the presumption order still stands, which is not likely to happen legally, as argued above.

The Birth Registration Process

Birth Introduction

Birth registration plays a substantial role in the identification of a child and the importance cannot be overemphasized. This chapter focuses on the process followed when registering a birth of a child, the importance of birth registration and the security vulnerabilities around this process. It also looks at the measures governments are putting in place to eradicate fraudulent birth registration. Additionally, we also looks at the method used in birth registration such as online registration and paper-based registration. It also focuses on obstacles that hinder birth registration globally.

Before we dive into the vulnerabilities it is important that we first understand what the government is up against in ensuring people actually register births. Even in the Western world, in developed countries an estimated 2.5% of people do not register births. We look at the government's tactical strategy to achieve these goals to

ensure that the registration is done accurately, quickly, and as cheaply as possible to ensure accurate birth records.

By understanding what the government is trying to achieve, highlights the vulnerabilities which allow virtual birth registrations, covered late in this chapter. When a software vendor releases a security fix, a hacker can reverse engineer the security patch and understand what the vendor is fixing. The hacker can use this information to exploit the un-patched system.

The Birth Registration process

Birth registration is a process that requires all births to be registered in order to facilitate identification of a new child. The law requires all parents to register the birth of their child by the appropriate time as outlined in the law by using a government issued application/form. On completion of the form, it is lodged with registry officials. In the United States, most of paper work of

the registration process is done by the hospital where the birth of the child took place.

The first step in registering a baby is that the doctor or a medical staff fill in the details of the birth, such as the baby's weight. One of the key requirements of completing the birth registration form is the place where the birth took place as well as the time when the birth occurred. Secondly, the parents of the baby are required to complete the birth registration form adding various particulars.

The date of birth is important as this will show when the baby was born. Secondly, the sex of baby and full names of the baby, are filled in which serves to reveal the identity of the baby. The names and addresses of the mothers and fathers are equally a primary requirement when completing the birth registration form. Medical delivery reports provided by the hospital where the birth took place are also filled into the form and the civil partnership date or marriage date of the parents may also be required. Lastly, the name of the midwife who assisted in the delivery is also filled in the birth registration form. The information required to complete the birth

registration form may vary from one country to another as registry requirements differ. In the case where one of the parents is not available during the registration process there may need to be proof of paternity for the other parent.

Either the father or the mother can individually register the birth and also take into consideration the details of both the parents as to whether they were in a marriage when the birth occurred. The other party who can register a birth is an unmarried couple where the particulars of both the parents can be written on the birth certificates if both the parents sign the birth register.⁵⁴ Another circumstance that may prompt the details of an unmarried couple to be included in the birth certificate is if one of the parents provides a court order to the registry officer giving the father parental responsibility. The mother of the child may also be allowed to register the birth on her own if she is not married and

⁵⁴ Ziemele, I 2007, *Article 7: The Right to Birth Registration, Name and Nationality and the Right to Know and be Cared for by Parents*, Leiden, Martinus: Nijhoff.

the particulars of the father are not to appear on the certificate of birth.

Female civil partners can also register a birth if there is enough evidence that the mother of the child conceived through fertility treatment or donor insemination.⁵⁵ In this regard, there must be proof that the mother was in a civil partnership by the time fertility treatment was taking place and the mother's civil partner is the child's lawful parent. Lastly, an individual present during delivery or an administrative officer at the hospital where delivery took place can also register the birth of the baby.

After the parents and the doctor have filled in the details on the birth statement, the information is registered in the births, deaths and marriage registry or the registrar if the parents or the hospital forward the information to a local or state registrar, who stores the record and issues certified copies upon request. The birth certificate is then signed by the registrar commissioned by the

⁵⁵ Mcginnis, C 2005, *Michigan Genealogy: Sources & Resources*. Baltimore, MD, Genealogical Pub. Co.

government. The documentation of human births is guided by various laws and statutes depending on the country and it is the responsibility of the parents, hospital administrator and the midwife to ensure registration of the birth is correct.⁵⁶ Article 7 and 8 in the United Nations Convention on the Rights of the Child state that a child should be registered as soon as the delivery occurs and the child has a right to be named and obtain nationality.⁵⁷ According to Sadig (2009), millions of births of children do not get registered internationally. In 2008, an approximate number of 51 million births, which translates to more than two-fifths of global births, were not registered. 58 This evidence indicates that despite the awareness and government efforts to try to improve birth registration there is still a notable percentage of births that do not get registered. This phenomenon is common in developing

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⁵⁶ Carpenter, RC 2007, Born Of War: Protecting Children of Sexual Violence Survivors in Conflict Zones, Bloomfield, CT, Kumarian Press.

⁵⁷ Betances, E 2007, *The Catholic Church and Power Politics in Latin America: The Dominican Case in Comparative Perspective*, Lanham, MD. [U.A.], Rowman & Littlefield.

⁵⁸ Sadiq, K 2009, *Paper Citizens: How Illegal Immigrants Acquire Citizenship in Developing Countries*, New York, NY, Oxford University Press. http://www.Myilibrary.Com?Id=182600.

countries which makes it difficult to access civic rights, but it also exists in Western societies. In Victoria, a state of Australia, it is estimated that 2.5% percent of births are not registered for indigenous and cultural reasons. Of course, this is only an estimate, but studies show that when a child begins public school at the age of 5 a birth certificate is required. Parents who want their children in school apply for birth registration 5 years after the unrecorded birth.

In Canada, provinces or territories are usually in charge of issuing birth certificates. Ministers, as well as agencies, take the responsibility of issuing the birth certificates. On the other hand, the issuing of birth certificates in the United States is usually done by the states. The United States has consistently improved their birth registration process. Standard forms which are used by individual states to register births are created by the United States National Center for Health Statistics. ⁵⁹ In this regard, different states however, can create their own form for birth registration.

⁵⁹ Jordan, T 2008, Vancouver: The Complete Residents' Guide, Dubai, Explorer.

This consequently makes the appearances and particulars in a birth certificate differ from one state to another in the U.S.

In the year 2000, approximately six thousand entities were in charge of issuing birth certificates and this is in accordance to the report given by the Department of Health and Human Services. The Inspector General also asserted that more than 14,000 versions of certificates are used in the United States and this is ascertained by the Immigration and Naturalization Service's Forensics Document Laboratory.⁶⁰

Procedures followed when registering a late birth

Sometimes the parents fail to register the birth of a child immediately after birth, like in the Victorian (Australia) example above, and therefore, the process of registration is different from the one done during birth. Firstly, the informant is required to

⁶⁰ Betances, E. 2007, *The Catholic Church and Power Politics in Latin America: The Dominican Case in Comparative Perspective*, Lanham, MD. [U.A.], Rowman & Littlefield.

report the location of the birth to the nearest registry office. After the information is submitted the registration personnel will interview the informant, who consequently fills out the Declaration form.

Thirdly, the applicant will pay the required fee to process the registration. Late delivery is usually charged a given amount of money. 61 The next step is the declaration of the partially completed document by the informants. In this regard, the informant declares before a Commissioner of Oaths and it must be supported by documents such as the certificate of baptism and notification of birth card. The registration officer will then attach a cover letter to the declared document and send it to the Regional Registration Officer through the District Registration Officer for the purpose of approval. The Regional Officer will then return the approved

 $^{^{61}}$ McMurray, C 2005, Birth Registration in the Pacific, Suva, Fiji, UNICEF Pacific Office.

documents and the Registration Assistant will make the entry of birth and finalization of the certificate will be completed. ⁶²

Methods used for birth registration and types of copies issued

The two main methods used in birth registration are the traditional form/paper-based and the new online registration. Electronic registration involves registering and applying for the birth certificates online. This method provides a convenient platform on which registration takes places. In Canada, there are options available with this method for the applicant when applying for the birth certificate of the baby. First, enrolling the baby in a medical service plan for British Columbia residents, and also, applying for Canadian child benefits. Applying for the baby's social insurance number is also a key requirement during online registration. However, despite online registration being convenient and user friendly it is only babies that are one year old and below that can

⁶² UNICEF 2005, The "Rights" Start To Life: A Statistical Analysis Of Birth Registration, [New York, NY], UNICEF.

be registered through this system. Taking this into consideration, it cannot be used to register children who are above one year old, which discourages people from using it.⁶³

The first step in an online application is choosing the type of birth certificate required, either short form or long form. A valid credit card is crucial to facilitate processing of the order online. The online registration method has a number of notable benefits to the applicants. First, the elimination of printing of the application form as well as a reduction of time used to take the hard copy back to the registrar. Costs associated with shipment of the paper-based method are eliminated and the time taken for shipment is also substantially reduced.

The two forms of certificates issued are short-form and long-form certificates. In Canada, the short-form or the card comprises name, date and place of birth, registration date, registration number as well as the date of issue. This short-form copy also contains the signature of the registrar which makes the copy legitimate. The

⁶³ Jordan, T 2008, *Vancouver: The Complete Residents' Guide*, Dubai, Explorer.

long-form certified copies usually entail place of birth, a two page form which outlines the detail of the person, parents' details as well as certification by the parent. Another primary part of this copy is the stamp of the department that is issuing the certificate, as well as a signature.

In the United States, a short-form certified copy is also accepted and it comprises the registrar's signature, and the date of filling in the certificate at the registrar office, among other particulars. According to a law passed on the 1st of April 2001, all birth certificates must contain full details of the parent of the applicants. A recent report shows there has been an increase in fraudulent registration of births by midwives. Another form issued in the United States is the souvenir birth certificates which usually contain footprints of the baby. Citizens consider this as a legitimate certificate while in the real sense is not. These types of certificates do not translate into acceptance as evidence of citizenship or age. On this, these certificates are not accepted by the Bureau of Consular Affairs when applying for other documents such as passports.

For adoption in the United States, as soon as the process is completed the government will seal the original copy of the certificate and will issue another copy of the birth certificate.⁶⁴ This will serve as a substitute for the original copy and the names of the adoptive parents are written on the substitute copy. The name of the child will also be changed in the new copy upon request of the adoptive parent. In many areas the original birth certificates are not granted to the individual upon request. This is because the government has already sealed the original birth certificate. In some states the adopted individuals may not be restricted from accessing their original birth certificates, but this will vary from one state to another and also on basis of laws governing the states. 65

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⁶⁴ Carpenter, RC 2007, *Born of War: Protecting Children of Sexual Violence Survivors in Conflict Zones*, Bloomfield, CT, Kumarian Press.

⁶⁵ Great Britain 2008, *Joint Birth Registration: Recording Responsibility*, Norwich, Stationery Office.

Reasons why many births are unregistered

There are various reasons why many births go unregistered globally as well as internationally. Social and cultural belief is one of the key reasons why many births are not registered in many countries. The attitude and perspective of people toward birth registration may translate into many unregistered births. Some individuals believe that the birth process should not take place in a hospital, hence the child will not get the opportunity to be registered by a hospital through normal processes. Additionally, some cultures see births in hospitals as a taboo, hence they encourage home delivery - increasing the number of unregistered births. 66

Traditional naming ceremonies also play a key role as many individuals would prefer to follow the ritual of their own culture.⁶⁷ Consequently, children will be named using traditional rituals and therefore there will be no legal evidence of the registration of the

⁶⁶ Great Britain 2008, *Joint Birth Registration: Recording Responsibility,* Norwich, Stationery Office.

⁶⁷ McMurray, C 2005, *Birth Registration in the Pacific,* Suva, Fiji, UNICEF Pacific Office.

baby. Discrimination also hinders mothers globally from registering their children because of attitudes and cultures that discourage birth registration.

The remoteness of the area where births take place also leads to unregistered births. 68 Many mothers are unable to access hospitals by the time they are ready to deliver the child which reduces the chances of the child being registered. After the birth takes place outside the hospital, the parents of the child may be reluctant to register the birth of the child, hence increasing the number of unregistered births. Accessing of the relevant facilities of registration is thus hindered by the remoteness of the area and lack of means to access the registration offices.

A large number of countries lack the relevant infrastructure to make it compulsory to register the birth of the child. The only people who are at the front line of accessing the registration are the ones located in the town centers and cities. This lack of law,

⁶⁸ Sadiq, K 2009, *Paper Citizens How Illegal Immigrants Acquire Citizenship In Developing Countries*, New York, NY, Oxford University Press. http://www.Myilibrary.Com?Id=182600.

similar to the lack of laws registering a death, ensure people remain ignorant about registration of the birth, hence, there is an increase in the number of unregistered births. ⁶⁹ Lack of staff officials in the registry office substantially increase the number of unregistered births because the informant will not get the registration official who will assist in registering the birth. Poorly paid trained personnel who lack resources in charge of registration will result in long queues of individuals wanting to register. This also discourages registration.

The cost incurred to travel to the registration centers also hinders registration. Most of the unregistered children are usually from poor backgrounds and the cost of transportation is a challenge. Taking this into consideration, many parents opt to never register their children due to the associated cost. 70 Illiteracy among parents leads to lack of knowledge of the registration process and additionally increases the number of unregistered births.

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⁶⁹ Graham, J 2007, *Sole and Joint Birth Registration: Exploring the Circumstances, Choices and Motivations Of Unmarried Parents*, Leeds, Corporate Document Services.

⁷⁰ Jordan, T 2008, Vancouver: The Complete Residents' Guide, Dubai, Explorer.

Unregistered children may also be from socially displaced or excluded families which do not recognize the significance of registering their children or simply they lack the necessary facilities to register the newborn.

Importance of birth registration

In the case of a child who is not registered, he or she may lack recognition and lack access to education and other services. Firstly, registration serves a legal and administrative purpose. An individual considers registration as a benefit because they are recognized by the law with a proof of birth certificate. Birth certificates enable an individual to apply for other legitimate documents such as passports and national identity documents. The government cannot carry out capacity planning without having the

⁷¹ Graham, J 2007, *Sole and Joint Birth Registration: Exploring the Circumstances, Choices and Motivations of Unmarried Parents*, Leeds, Corporate Document Services.

correct birth records as well as other activities that require an estimation of the number of people in a given country.

A birth certificate enables a child to access education services, and conversely, the lack of registration hinders a child's participation in school. In this regard, registration will enable a child to enroll in schools which are publicly funded. A Birth certificate also enables identification of the child by the government for the purpose of protection from crimes and abuses. 72 There was a horrific criminal case in Australia, where a child died whilst in the custody of its parents. The young child, 3-4 years old, was starving to death, not being fed or cared for by his parents who were drug affected. The child cut himself on an open cat food tin, got an infection and eventually died. It was discovered by the coroner that the child's birth was not registered or recorded on any government system. Most governments have systems in place, for example, when a child is born, it is then protected by regular visits from a health-

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⁷² Graham, J. 2007, Sole and Joint Birth Registration: Exploring the Circumstances, Choices and Motivations of Unmarried Parents, Leeds, Corporate Document Services.

nurse and regular vaccinations; this gives the authorities a good view into the housing environment and raises any appropriate 'red flags' for abuse or neglect. The other group where children are not being registered for a variety of reasons include home births, Aboriginal/American Indians or non-English speaking families who mistrust the government or do not understand the paperwork process for registration.

Additionally, it also serves as a means through which the government gives the legal right to the child as the government will have the possession of the identification documents. Birth registration gives a child the right to inherit his or her parents' property upon their death. In order to inherit a specific property, an individual is required to provide legal documents of identification which will prove the family ties enabling him or her to get the inheritance.

Birth registration creates a permanent record of existence so that in the case of an occurrence of disaster that may lead to separation of parent and the child, the registration documents will enable later

reunion with the family. Effective identification equally enables a child to access world health care. Approximately one million children annually die from diseases, which are preventable, before they reach the age of five years.⁷³ Consequently, unregistered children will often not access the health care services or will eventually pay an extra amount than the registered children. Therefore, a birth certificate plays a vital role in accessing medical services and the required vaccinations to prevent the child from contracting diseases. Planning of immunization programs will also be made easier as the number of children to be immunized is known. The government will use the statistical data from the birth registration records to fulfill social and economic needs of its people. Therefore, the importance of birth registration cannot be over-emphasized.

⁷³ McGinnis, C 2005, *Michigan Genealogy: Sources & Resources*, Baltimore, MD, Genealogical Pub. Co.

Strategies adopted to improve birth registration

With the high number of unregistered births increasingly, governments from developed and developing countries are increasingly adopting strategies to improve the rate of birth registration. The issue of registration has been a challenge despite its everyday awareness that is created globally. Creating awareness and training of birth registrars is the primary strategy that should be adopted to increase birth registration rates. 74 Many of the unregistered births are as a result of the lack of enough awareness on the importance of birth registration. Many parents lack relevant knowledge on the benefits that come with birth registration, such as access to health care. Training should be also intensified among the registrars so they can carry out the registration with ease as well as with professionalism.

Secondly, integration of birth registration into health services is a key strategy that translates into an increased number of births

⁷⁴ Graham, J 2007, *Sole and Joint Birth Registration: Exploring the Circumstances, Choices and Motivations of Unmarried Parents*, Leeds, Corporate Document Services.

being registered. The registrars should be placed in almost every health center, maternity clinic and hospitals as this will help the registrar to register the increasing amount of unregistered children to clear backlogs. Integration of health provision with birth registration activities will enable many parents to register their children as they seek the medical services in these centers.⁷⁵

Adopting an online birth registration system will ease the process of registration as well as save time used in manual registration. Computerization of registration will help save costs incurred in printing the manual paper, hence increasing the birth registration rate. The availability of mobile phones and tablets that are affordable and have access to the internet will motivate many individuals to register births as it is simple to use, and there are no queues or transportation costs.

Implementation of laws to support birth registration among individuals will increase the number of births being registered.

⁷⁵ Ziemele, I 2007, Article 7: The Right to Birth Registration, Name and Nationality and The Right to Know and be Cared for by Parents, Leiden, Martinus Nijhoff.

Having a law which dictates that all children must be registered despite the legal status of the parents or without the presence of the father can greatly improve birth registration.

When establishing a birth registration system, the first step should be clearing the backlog of the children who are not registered.⁷⁶ This measure is usually effective after an occurrence of a disaster or armed conflict. This measure takes into consideration direct support to assist government campaigns on registration through mobile registration of births. Fraud of passports has been rampant in the United States with approximately 40 percent of passports involving counterfeit birth certificates. It is a fact that many individuals are obtaining fake birth certificates creating a threat to the government. Florida has been experiencing this fraud for the last few years which has forced the Puerto Rican government to pass a law which revokes all the birth certificates that have been issued before the year 2010. Consequently, new birth certificates

⁷⁶ Graham, J 2007, Sole and Joint Birth Registration: Exploring the Circumstances, Choices and Motivations of Unmarried Parents. Leeds, Corporate Document Services.

were issued which could not be counterfeited or duplicated, hence reducing fraud.

Personal experience

I am the father of four children. Two of them were born in a hospital an two of them were home births, so I bring first-hand experience with both the hospital experience of birth registration as well as the do-it-yourself home birth registration scenario. At the hospital, after the delivery of my first born, the doctor filled out their sections of the document including the doctor's name, baby's weight, birth location etc. My wife and I filled out the sections on the child's name, the parents' names and home address details. We then sent this completed form to the government registry and within a few weeks we had the birth certificate for our first child. For the children that we had home birthed we had a registered midwife to assist us with the delivery. After the birth, the midwife filled out her details and again we filled out our details and again the form was sent into the government registry. Since then this system has now moved online. The parents and midwife can fill out their details together online and complete the birth registration process.

The vulnerabilities in the birth process

The government is in a difficult position. They want to make sure babies are registered and to do so make it simple and remove all barriers to achieve their goal. By doing so though, they create an avenue for malicious people to create virtual babes for fraudulent purposes. The government are in a 'catch-22' position; they want to secure and protect Birth Certificates from identity theft which is on the rise, but at the same time, not make it too difficult for more vulnerable members of the community who struggle registering their children.

This section of the chapter will show the vulnerabilities in these new procedures. It will also show the differences between the traditional identity theft modification of existing birth certificates and creating a new identity with a real birth certificate and the beginning of the life of the **Virtual**.

The Birth Process

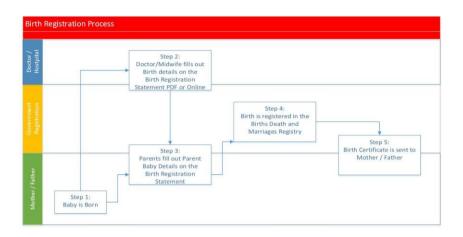


Figure 37 The Birth Registration Process

As you can see from Figure 37 the process is very similar to the death process. Two parties are required to fill in and submit a document either online or by hard copy to a government agency which issues the birth certificate. In the death registration process, we had the doctor and the funeral director. To commit fraud we would have to assume the roles of both of them.

However in the birth registration process, we have the parents and the midwife/doctor completing the document. What this means is that the parents, if malicious, can fraudulently assume the role of the midwife/doctor in the process and then fraudulently submit the birth registration.

If you remember the death registration process, you had to fraudulently assume the role of the doctor and the funeral director (or become a funeral director) - requiring you to play both parts. The birth registration process is a lot easier in this regards to perform fraudulently, all you need is a doctor and midwife's medical details. We saw how to get this before. In other words, you can put your own name down as the mother or father.

Traditional paperwork in Australia

Figure 38 below shows the traditional paper document filled out in Australia completed by the Doctor/Midwife and the parents to register the baby. This document is then sent into the registry and a birth certificate issued.

Parents register via Birth Registration Statement

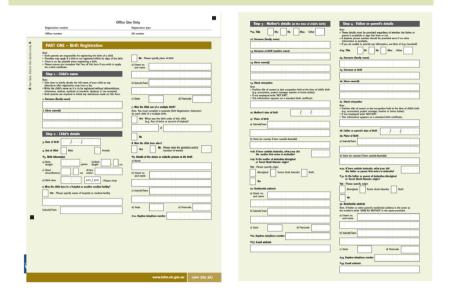


Figure 38 Traditional Paper-based Birth Registration Document in Australia

Online process in Australia

The online process couldn't be any easier in Australia. Each state again is slightly different, but basically has the same process. A hacker could fraudulently put in fake details of a new born, and when requested to put the details of the Midwife/Doctor, the details can again be obtained by the Public Doctor/Midwife by looking up http://www.aphra.gov.au. Figure 39 shows the online birth registration for Victoria in Australia, whilst Figure 40 shows

the birth process for South Australia. All that is required is the license number, name and address of the midwife and you can fill in their sections for them to create a new baby.

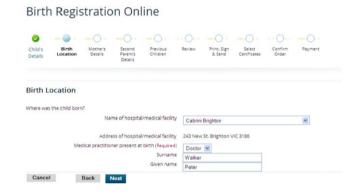


Figure 39 Online Birth Registration in Victoria, Australia

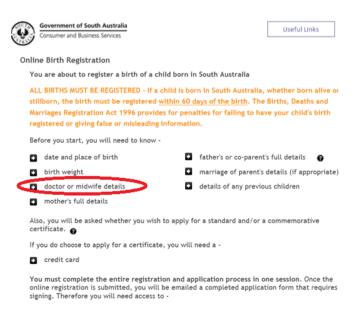


Figure 40 Online Birth Registration in South Australia

Search Results

Your search for a **Midwife** named **Smith** returned more than 50 results. Only the first 50 are displayed here. You can refine your search or start a new search.

Mrs Aimee Elizabeth Smith Profession: Midwife			
Registration number:	NMW0001942558	Endorsements:	No
Status:	Registered	Notations:	No
Registration expiry date:	31/05/2016	Conditions:	No
Principal place of practice:	MAITLAND	Undertakings:	No
	NSW 2320	Reprimands:	No
Registration Type:	General		
<u>View Details</u>			
Miss Aimie Louise Smith			
Miss Aimie Louise Smith Profession: Midwife	NMW0001707973	Endorsements:	No
Miss Aimie Louise Smith Profession: Midwife Registration number:	NMW0001707973 Registered	Endorsements: Notations:	No No
Miss Aimie Louise Smith Profession: Midwife Registration number: Status:		Eliasiosiiisiits.	
Miss Aimie Louise Smith Profession: Midwife Registration number: Status: Registration expiry date:	Registered	Notations:	No
View Details Miss Aimie Louise Smith Profession: Midwife Registration number: Status: Registration expiry date: Principal place of practice:	Registered 31/05/2016	Notations: Conditions:	No No

Figure 41 Public Search portal to find Doctor/Midwife details

Online process in Canada

There is no difference in registering a baby in other countries as well. Below is an example of how parents in Canada register a birth.

Again the same details are required and details about the doctor and midwife can be entered using public databases.



Figure 42 Online Birth Registration in Canada

The government registry will now have both sections of the document completed and a copy of the birth certificate will be sent out to the family.

Online process in the U.S.

In the United States, the birth registration process differs from state to state. Some states still use rely on the hard copy paperbased systems and other states have moved to an online birth registration system. Many states use a self-service portal similar to the Electronic Death Registration System. For example, in New York you can use a self-service registration portal using a doctor's details to gain access to the Electronic Vital Events Registration System (EVERS). Medical facilities and funeral directors preauthorized by the NYC Health Department can report births, deaths, and terminations of pregnancy with the agency using the Electronic Vital Events Registration System (EVERS). I found the Electronic Birth Registrations system rollout was not as mature as the Death Registration with less than 20% of states accessible.

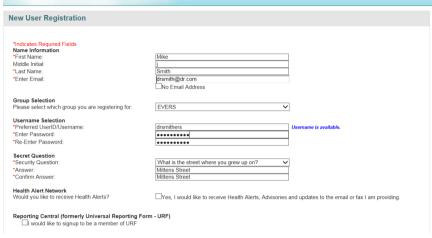


Figure 43 DIY online self-service portal for Birth and Deaths in New York

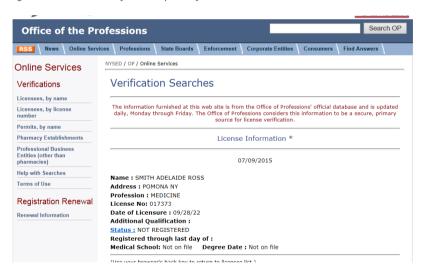


Figure 44 Obtaining Doctor/Midwife details for your application

Why would anyone make your own Virtual baby?

The most obvious reason is for finance, such as government benefits and tax concessions. A fake baby can be used to obtain more benefits from the government and in some countries a baby bonus upfront payment.

However the most intriguing reason, I believe, is the spare identity scenario. If you killed yourself off in the death registration process, you could create yourself a new identity. You could be like a cat and have 9 lives. "A Do Over" identification. If you've ever made a mistake in your life why should you suffer for your whole life? Do you have a Criminal Record, have ever been bankrupted or really screwed up. Why should you have a permanent record of that for 100 years? Start afresh, with a new identification.

You could also set up a **Virtual** Identity to commit crimes (Life Insurance fraud, money laundering, and Drug/Firearms importation) and none of it would be in your name. I introduce you to this new technique called the **Virtual** (virtual baby) and explain

how this can be used for money laundering, criminal financing and general chaos.

Identity theft vs New Identity

Over the past few decades, identity theft has become widespread. Reports of financial and criminal identity theft have been making headlines globally. This has served as a wake-up call for many nations to improvise mechanisms of fighting identity theft in a more meaningful way. Committing identify theft is not a complex task and anyone with Internet access can see how easy is to pull off. There are books written and published by Paladin and Eden Press, like the Paper Trip, which explain these methods and how to pull them off. The new identity of the **Virtual** is not identity theft. There is no victim. There is no theft.

We will look at the **Virtual** baby technique which relies on no traditional identity theft. Because there is no victim there is no

victim to report these offenses. No one's identity is stolen, only a new fake person enters society.

Earlier on in my career, I used to teach young 'penetration testers' the art of social engineering, lock picking and other essential life skills. One part of the demonstration was the ability to remove a person's name from a Birth Certificate, using a piece of Scotch tape. The tape had different grades of stickiness, and by picking the right grade of sticky tape, not too-sticky not too-soft but in the just-right 'Goldilocks zone', you could remove the ink cleanly off the Birth Certificate without damaging the paper. The student could then print another name using the same font, eventuating in a good quality forged Birth Certificate; good enough for bank account openings, but not good enough for passports. Each Birth Certificate is numbered and the last thing you want is a different name matching a numbered birth certificate, if it happens to get checked back at the Births Registration government department.

'Kevin Mitnick', was a famous hacker from the 1990s. He now runs a security consulting business as well as making presentations. In

2014, at a Hacking conference called DEFCON, he proved he could get anyone's social security number online in just under three minutes. It was the technique he used for fake identities in the 1990s whilst on the run from U.S. Marshalls and it was ingenious. He found a flaw in the system in the United States with regards to the Birth and Death correlation between U.S. State government departments. He discovered that if a child, for example, was born in California, but died in Colorado as an infant, the Death records did not necessarily pass back to California to update their systems and record the child as deceased. In other words, the child that died 20 years ago is still recorded as living in California. He found in sister states, like California and Nevada, the records of the 'death' moved back to California (in this example), but not for long-distance States. You could then assume that identity by obtaining the birth certificate and social security number, and then get a job and driver's license under that identity. Kevin used multiple identities using this method and was a fugitive of the U.S. Marshalls for twoand-a-half years. In the end, he was tracked down using cell triangulation. His method, whilst ingenious and ahead of its time, does has some risks. You will need to obtain a Birth Certificate first using fake IDs and you might get caught when the death record makes it back the birth State.



Figure 45 Kevin Mitnick Wanted Poster

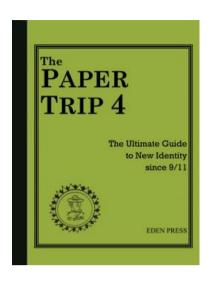


Figure 46 The Paper Trip: A guide to the Birth certificate and fake id's

Identify theft strengthening the birth certificate

Criminals are stealing identities for financial gain. It is the same as if you stole someone's car. The victim will eventually see that their car is no longer parked in their driveway and report the crime to police. The police will investigate and ask the same questions. Was the car locked? Did you have an alarm? The police will advise you to make sure you lock up your car next time, install cameras or put it in the garage. If you are the victim of identity theft, you will also be advised to shred your mail and watch what you post online.

The Virtual baby is different to what we have just discussed. It relies on social engineering techniques, but it never involves stealing someone else's identity. Here is where the problem is authorities focus their manpower for protecting the birth certificate and other sensitive documents. They make it difficult for anyone to obtain a copy of a birth certificate unless they possess the proper identification and are related. They will introduce security mechanisms such as holograms, security paper and watermarks to protect this document. The more secure the birth certificate, the better it is for the virtual baby. If this document is considered more and more trusted out of any of the identity documents, and it is harder to make fake copies, then an original birth certificate will become the most trusted of documents for the child. The virtual baby does not rely on a fake certificate, a real one is obtained registering a child from birth. I say bring on more holograms, it will keep my Virtual baby from having their identity stolen.

Identify theft costs

Identity theft is on the increase around the world and with cheap computer printers and scanners, borrowing funds using your victims stolen name is quite a profitable crime. Identity theft is when someone accesses another person's private information for fraudulent purposes. The victim of the identity theft can suffer, if they are held accountable for the actions of the fraudulent person. This could be from using a driver's license obtained from using a stolen identity after a speeding ticket or using their credit rating to obtain finance. Identity theft for criminals is very appealing, giving instant financial gain. However a victim will soon identify that their identity has been stolen through bank statements and report the offense. Hence, the criminal spree is often short-lived. However, the damage can last a lifetime for the victim.

One method involves using another person's identity to acquire resources or for financial gain. In every year, about 15 million Americans are victims of identity theft, making the total losses

approximately 50 billion dollars.⁷⁷ On average, \$3500 are lost through financial identity theft in every incidence, hence exposing the nation to a great threat of losses. As you can see, the net harvest from a traditional identity theft is quite small per person. \$3500 might sound like a lot of money, but a **Virtual** should be capable of bringing in hundreds of thousands per identity and without any victim.

Medical identity theft

According to Langton and Planty (2010), medical identity theft is also another form of identity theft that occurs when an imposter uses another person's identity to receive medical health. As a result, the victims' credit records and insurance records will be affected. Langton and Planty (2010) explain there are several warning signs that can serve to inform about theft in medical

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⁷⁷ Camp, LJ 2007, Economics of Identity Theft Avoidance, Causes and Possible Cures, Springer E-Books, New York, Springer.

http://Public.Eblib.Com/Choice/Publicfullrecord.Aspx?P=337340.

identity. Firstly, an individual is likely to receive a medical bill they did not use. Secondly, the victim of medical identity theft may get a call to pay medical arrears that the victim does not owe. They further state that the victim is also likely to get a notice that the benefit has reached a maximum value, hence and lastly, the victim may get notices from credit reports that there is money to be collected. By using the Medical Identity theft concept, Virtuals could be bred for the sole purpose of having an identity with Medical Health insurance. A Virtual identity could be sold off to a sick patient that has the finance but no health insurance policy. This would be a designer baby, bred for medical insurance and again there is no victim to report unexpected charges on a health insurance statement.

Child identity theft

Over the past decades, Nemati (2014) noted the problem of child identity theft has been increasing at about 10.2 percent per year.

According to Hoffman and McGinley (2010), child identity theft occurs when the child's private data is used by the thieves for individual gain. They further state the identity thieves use the information to get employment as well as to avoid being held for criminal charges. Meulen (2011) argues the main reason why children are the main target is because the crime can stay undetected up to the age the child becomes an adult and can apply for credit, and hence identity thieves can use the data for many years. Stickley (2009) backs up this claim indicating the social security numbers of children are usually not in use which make them vulnerable to child identity theft. Langton and Planty (2010) outline the major indication that the child has become victim of identity theft. He starts by stating the victim may get a warrant for arrest under his or her name, a credit report that exists under the child's name, and lastly denial to open a bank account due to a bad credit history. You can see the criminals are quite smart using the children's identities for this purpose. However, if they develop the Virtual, explained in the next chapter, by paying the minimum

amount of taxes, when the child reaches adulthood the criminals have a more profitable asset. There is no victim in this case. There is no stolen identity, you've created one out of thin air. It's like the financial term "quantitative easing" but instead of printing virtual money for banks to lend out, we are printing virtual people.

The Baby Harvest

Overview

The remaining chapters are written as a 'How to guide for criminals'. However, this is to show the weaknesses in the identity systems for governments and law enforcement. It is envisaged as a playbook for authorities to beware of the vulnerabilities in current systems and not to depend on Big Data money laundering heuristics in tracking these syndicates down. There are already systems in place to reduce identify theft, such as the protection of birth and death certificates from government bodies as discussed in previous chapters. At present, the weakness is in the creation of these documents in the first place. As seen in the death and birth chapters, the government want people to register their children to enter mainstream society and have the ability to pay taxes, get a driver's license and conduct and participate in normal business. They also want accurate death records for infrastructure planning. By strengthening the birth certificate with security mechanisms

such as holograms, preventing identity theft, they are creating the perfect storm of virtual babies being registered into society globally for criminals. The government is heading into trouble by creating a system that makes it easier for society's most vulnerable people to register their children. In turn, they have created their own vulnerability by following this policy. The government cannot have it both ways, they cannot have an increase in births with simple online registration without a criminal element taking advantage, especially when it can be so profitable.

"The Baby Harvest" is the concept of a criminal syndicate making and raising Virtual babies to adulthood, to be put on the shelf for strategic long-term financial, empire building. The babies, once reaching adulthood, will marry other Virtuals, obtain finance, enter the derivatives markets, obtain life insurance and will ultimately be harvested, or 'killed off', at investment maturity.

The technique is based on a 'shelf company'. A 'shelf company' is used by criminals or terrorists who pay all their fees and file incorporation papers, annually. They then put it on the shelf for

years, sometimes decades; they pay the minimum amount of corporate tax; build up a credit rating and comply with filings to create an established, creditworthy business that can be used to launder all kinds of transactions.

The idea of the Shelf baby came from the accounting concept of a Shell/Shelf company, that can be used exactly the same for **Virtuals**. A 'Shell baby', is an individual who exists on paper only and is used when required by other individuals. The 'Shelf baby' is more active; it collects government benefits, pays tax and for all intents and purposes, actually exists in the government and financier's eyes. We will firstly look at the concepts to give you a better idea.

Shell Companies

A shell company is a company set up by an accountant or lawyer as an entity that has no active business. It usually exists only in name and on paper, and as a vehicle for another company's business operations. Shell companies are not illegal. Some business clients need companies to be set up quickly and cheaply. The accountants, can set up companies ahead of time, e.g., 'Jane's Bakery' and then sign the company over to a client without the delays involved in setting up a company which can take a while in some jurisdictions. Think of it this way; when you go to a bakery and buy bread at some places, they cut the bread and bag it in front of you, so you know it's fresh. Sometimes, at the counter the baker's assistants have already sliced the bread and bagged it so you don't need to wait.

Shell companies also allow owners to hide their identity, maybe for asset protection or to hide two conflicting businesses. Legal accountants use the term "Piercing the veil" in trying to identify the individuals who are really running the company.

However, shell companies can be misused by criminals, using them for money laundering, union payments or tax evasion. A shell company gives the extra layer of protection by anonymizing the company's true owner, contact names and addresses. There are sometimes shell company setups in tax havens like the Canary

Islands or Virgin Islands, even further protecting criminals from authorities who may be checking ownership by hiding assets and money. Shell companies do not need to be set up in obscure countries to hide your identity. Many countries in the Organization for Economic Co-operation and Development (OECD) have 'accountant agents' that can be paid a premium in order for your identification to not be required.

Shelf Companies

A Shelf company, takes the shell company one step further. Instead of lying dormant, a shelf company is an active company that files tax returns annually, pay taxes and appears to have employees. They build up a credit rating and sit on the 'shelf' for decades. These companies can apply for finance and do not raise the 'red flags' that some shell companies do. These companies are more expensive to keep going than the shell company; they require a lot of work for the accountants to maintain and attract a higher premium for criminal syndicates. However, instantly the client has the ability to

borrow funds, invest money gained from illegal sources (money laundering) and appear completely legitimate. The Shelf Company and the Shelf baby can work hand-in-hand. The syndicate will have the ability to create a **Virtual** company with good income records, as well as **Virtual** staff for anonymity.

Shell Babies

A shell baby, like a shell company is an entity that appears only on paper; in this case, a birth certificate. The baby is registered with the government as a born entity, receiving a social security number or registration number, a name and address. The shell baby is set up in advance by the syndicate. Unlike a shell company the shell baby cannot be used for large financial purposes straight away. It is a bit difficult for a baby to get a car loan or life insurance, but they can be utilized for the purposes of a bank account, government child payments and tax breaks. The shell baby can be used by criminals to obtain a driver's license, bank account and passport in the future.

Shelf Babies

The 'Shelf babies', known as **Virtuals**, will follow the same concept. Virtuals will be "born", registered with the government complete with birth certificates and social security numbers. They can open up bank accounts, get a virtual job to launder money, pay taxes, obtain home loans and obtain life insurance policies. They will be married to other Virtuals, create more fake children and when they are ready for 'harvest', they will be 'killed-off' for their finances such as laundered money or life insurance payouts. 'Losing' Virtuals can place high-risk, high-leveraged stock derivative options and can potentially lose everything (financially). The 'losing' Virtuals can go bankrupt and be shelved, whilst the 'winning Virtual' traders can place the opposite orders of the 'losing' Virtual and bring back the money to the syndicate. It is similar to having twenty of your own clones; you can take highrisks, without any negative financial impact. These long-range techniques span decades and will be the next 'big thing' in terrorist financing and criminal money laundering in the near future.

Virtuals with legitimate paperwork, which the government is strengthening with financial history, can launder money, making the **Virtual** very powerful for criminal syndicates.

Shelf Babies benefits

A shelf baby is similar to a shelf company and possesses the following characteristics:

- A government birth certificate
- Bank accounts
- Student Card and Driver's license
- Legitimate Passport
- Marriage certificates
- Tax records
- Financial history and loan repayment history
- Life insurance

This combination of legitimate paperwork and financial history makes this individual very powerful. Each of the **Virtuals** can do the following:

- Borrow multimillions of dollars of loan financing for property, personal loans or credit cards.
- Allow laundered money to be passed through their accounts as employment payments from other Virtuals.
- Have a Virtual as the owner of a Shelf company to protect the owner's true identity further preventing 'piercing of the veil'.
- Have multimillion dollar life insurance policies on death used to finance other Virtuals and stock market risks.
- Use the Virtual's Medical insurance to cover the noninsured cancer patient.
- Have the ability to buy risky, highly-hedged derivatives/options without fear of loss. If the trade pays off, it adds not only multimillions in finance, but it also allows for bigger trades. If the loss is too great, the Virtual

can be killed off for the life insurance or bankrupted and put on the shelf for 3-7 years as defective stock (harder to get finance) and eventually sold at a discount.

Designer Babies

Not all Virtuals are raised the same. A 'Designer baby' is a fit-forone-purpose baby to perform a certain task at harvest. You may want a designer baby identity to ship in a cache of firearms, drugs, sells fake bitcoins, stock trader, eBay power-seller or a high income earner and high tax payer for life insurance. Each baby raised will have a certain income or tax paying history according to their intended role. There is no point raising a Virtual for twenty years with a high income and tax receipts used for firearm shipments or drug purchases when the Virtual will probably only be used for a short period of time before its shut down. It would also be counterintuitive to raise a Virtual for life insurance with an average recorded income of only \$15,000/year, to find your life insurance payout is a measly \$180,000 at death. Virtuals must be raised in categories according to their predetermined task. 'Throw-away' babies for small, risky tasks, 'medium-term' babies for stock trading and risky financial tasks, and high income earners and the prized 'Rich' babies for loans, life insurance, and money laundering and stock purchases. Like growing an apple tree that only takes a few years to fruit compared to growing a chestnut tree for over twenty years, each baby requires a different amount of time and investment to get the best fruit at Harvest time.

Each of these Virtuals (shelf babies) will be able to do the following:

The Loan Virtual

Borrow multimillions of dollars of financing for property, personal loans or credit cards. The **Virtual** will have a perfect finance record, they will lodge tax returns and they are employed by other **Virtuals** and receive a good salary with impeccable bill payments and finance history. They are married to other **Virtuals**, with no dependents (children of their own). Using modest deposits, they

can borrow 90% for property and business purchases, they can take out personal loans for cars and credit cards and they will continue to make the normal payments from laundered money and the assets used by the syndicate. Loan repayments are paid using the **Virtual's** fake job, which is receiving payments via laundered money from drugs, for example.

Laundering Virtual

Allow laundered money to be passed through their accounts as employment payments from other **Virtuals**. **Virtuals** cannot get regular jobs as they do not exist (you cannot have them turning up to 'Starbucks' and making the minimum wage). However, you can have them working as self-employed, regular companies or Shelf companies run by other **Virtuals** and they are able to move money from the criminals into a Shelf Company and to the Shelf baby through legitimate asset purchases.

Life Insurance Virtual

Your Virtual is worth millions of dollars by having multiple-life insurance policies taken against 'it'. You would start by taking out life-insurance policies, insuring your Shelf Baby from adulthood by paying the premiums for 10-12 years to avoid suspicion. Your Virtual spouse or 'Trust funds/Family Trust' can be the beneficiaries of your estate. By insuring your Virtual with multimillion dollar life-insurance policies against an 'untimely death', you can learn how to retain large sums of money that can go back into the syndicate or legitimate businesses for other Virtuals to 'work' (for income). In the chapter covering Life insurance we will delve into the best policies so that your virtual will net the biggest return.

Day Trader Virtual

The most lucrative ways of making large sums of money from your Virtuals is the ability to use massive leveraging, on option or currency trading or using layered-option share trades. Layering is the use of online orders that the trader does not intend to be executed, but to entice other traders to buy or sell the security at a price which is not 'true' of the actual market demand. In other words, propping or dropping the price to suit your real buying requirement, for profit. Using other **Virtuals** you can reveal real traders positions or entice them into fictitious trades.

Your **Virtual** can make the highly-risky-leveraged trades without the fear of any loss. If the trade pays off, it adds not only multimillions in finance, it also allows for bigger-leveraged trades. If the loss is too great, the **Virtual** can be killed-off for the life insurance or bankrupted and put on the shelf. I've included in this book a chapter on the stock market which introduces the basic fundamentals as well as delves into the more complex trades and an analysis of the Flash crash of 2010 to highlight what is possible wit **Virtual** traders.

Criminal Virtual

The military and police use robots or machines to defuse bombs to prevent deaths and injuries to soldiers. Using the same technique, why use your own identity to commit a crime and face imprisonment. Send a Virtual in to do the dangerous work. Use your Virtual's identity to import drugs to a warehouse from Columbia, or purchase firearms or purchase bitcoins with another layer of anonymity, rent the services of a hacker or hire a 'hit-man' to kill someone (physically this time not virtually). Use Virtuals to make bribery payments to officials as the middle man between a local government and a construction deal.

It's in the Numbers

When you're thinking of a shelf baby concept, do not think in single numbers. This technique works best with large number of **Virtuals**. Think hundreds of **Virtuals** per syndicate, to maximize the time and money invested. Like growing wheat for harvest, there is no profit

in one square meter of wheat; the profit lies in multiple hundreds of fields/multiple hundreds of **Virtuals**.

For the average guy or girl

For the individual who wants a spare identity, a "Do Over" ID for if they ever become bankrupt or get a criminal record, why should you suffer a mark against your name for the rest of your life. A life is a long time; get a new Identification and start afresh.

Imagination and growth

The Shelf baby, is only limited to the imagination of the **Virtual's** handler and a lot more cunning techniques can be adapted for profiteering for the criminal syndicate. This book has and will guide you through this process of creating a Shelf baby to harvest, the things to watch out for and the things that should be considered. Like growing wheat for harvest, it needs watering, food, sunlight and fresh air to flourish. So too do your shelf babies in order to get

the most at the end of the harvest. Instead of water and food, sunlight and fresh air, your shelf baby needs a Birth Certificate, a job, to pay taxes, get married and tap into the endless quantitative-easing-low-interest-loans available to 'real' people with excellent credit ratings.

My advice: choose your **Virtuals** wisely! For a **Virtual** still needs a real person to meet with the bank or audit agent, line up at the DMV and meet up with the life insurance salesman and doctor for health checks. **Secrecy and choosing criminal family members is the key for success in this venture.**

Terrorist Finance and Money

Laundering

Introduction

Over the past few decades, instances of terrorism and money laundering have significantly increased on a global scale. Terrorism usually has a substantial impact on various aspects of life as well as on a country's economy. Owing to the effects of terrorism and money laundering, the world's governments are taking aggressive, preventive measures to combat money laundering and criminal financing to maintain peace. Consequently, the terrorists are also devising mechanisms of increasing their action against various countries. The heart of any successful terrorist and criminal enterprise is the ability to be financed for weapons, training and bribery.

Therefore, this chapter aims at exploring the concept of money laundering and terrorist financing. Additionally, it aims at exploring

existing techniques used in money laundering and the reason behind the terrorist's actions. It also looks at past studies on the effect of money laundering and criminal financing.

I examine pieces of literature specific to this topic and review the mechanism of combating money laundering and creating awareness of the existence of terrorism amongst the people. Using this knowledge, we see how existing combat measures stack up against the baby harvest concept and how they can be extended to identify the baby harvest techniques. In order to know how to avoid detection, we firstly need to measure the current security mechanisms in the finance world. This chapter is guite technical and makes references to a lot of academics books. There is a specific reason for this. It is these academics and 'experts' that designed the money laundering algorithms to detect this sort of activity we are trying to bypass. Keep this in mind as you read this chapter.

Concept and process money laundering

Money laundering can generally be defined as a practice of disguising the origin of illegally obtained money to make it appear as if it was obtained through legitimate means or from a legitimate source. 78 If you are a successful drug dealer earning a few hundred thousand dollars a month, you cannot just walk into 'Citibank' with multiple bags with \$\$ signs on it and not gain attention. The bank staff will report this to the authorities as suspicious activity; most of the world's banking activity, however, is done electronically. Any large sums of money deposited are usually from another bank, investment firm or real estate firm, not from a customer walking in off the street. In the event of a transaction from a customer that appears large, most bank staff will bring up and query the large amount in 'casual conversation'. For example, the bank staff may inquire and you might answer that you need USD\$14,000 to pay the 'contractor' for renovations done on the house. You (as the

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⁷⁸ Schott, PA 2006, *Reference Guide to Anti-Money Laundering and Combating the Financing of Terrorism*, Washington, DC, World Bank [U.A.].

customer) may even back this up showing photos of your new kitchen to reduce any suspicion (as you may in fact had renovations just done on your house).

'Breaking Bad' on the HBO Chanel

A great example of money laundering (in order for you, the reader, to be able to visualize the concept), is from the hit show, 'Breaking Bad' featured on HBO Chanel. Walter White, a chemistry teacher falls ill from lung cancer. To ensure his family is cared for after he dies, he enters the methamphetamine manufacturing and distribution business. Walter makes so much money from the business and requires assistance to hide the ill-gotten proceeds from his neighbors, family and drug enforcement agent brother inlaw. Unfortunately, a teacher depositing large sums into a bank weekly will trigger many alerts within the system. Walter seeks the assistance of a criminal lawyer, Sol Goodman, who educates him on money laundering. They look at businesses such as a beauty salon, car wash and gaming arcade. They hunt for a business that

has a high cash turnover so they can put the criminal proceeds through the cash register to hide the drug money. The accountants, IRS agents, Walter's family, and banking authorities see a successful car washing business and do not suspect a thing. Walters's wife 'Skyler', with a background in finance and dealing with the IRS, tries to protect Walter by ensuring he doesn't buy expensive vehicles or 'flaunt' his money around to attract attention. Unfortunately for Walter, he amasses so much money from the drug business, Skyler is unable to launder that high amount of money through one car wash alone. His options are to either buy more cash businesses or store the money. Skyler ends up renting a storage facility to stack the money in, which is too large to put through one car wash, with estimates of USD\$17 million plus. For criminals, laundering money is sometimes more difficult than making the money in the first place.

Cash is heavy

The majority of criminals who launder their money, include terrorists, drug dealers or drug/human (and other) traffickers and corrupt officials. The main reason why drug traffickers launder money is because they deal in 'cash money', which poses a lot of challenges while transporting it from one location to another.⁷⁹ This money from drug trafficking is usually prone to authorities/law officials while in transit, hence the said 'criminal' must devise a means of making the money legitimate in order to eliminate having their funds seized. 80 The other reason why drug traffickers launder money is because it is heavy to transport, hence the logistic challenges behind this. In the case of transporting cash obtained from the sale of 50 pounds of cocaine, worth approximately one million US dollars and weighing approximately 10 kilograms, it is heavy and difficult to transport, especially when the deal is in

⁷⁹ Hopton, D 2009, *Money Laundering: A Concise Guide for all Business*, Surrey, England, Gower Pub.

http://Public.Eblib.Com/Choice/Publicfullrecord.Aspx?P=446447.

⁸⁰ Chatain, PL 2009, Preventing Money Laundering and Terrorist Financing: A Practical Guide for Bank Supervisors, Washington (DC), World Bank.

tonnes of cocaine. Money laundering may occur with the assistance of financial experts and financial institutions, as was seen in the recent case, whereby the news reported that the HSBC Bank in Switzerland had been accused of turning 'a blind-eye' in regards to deposits made by suspected arms dealers, blood diamond traders and other criminal groups laundering their criminal proceeds.

Government authorities and other relevant authorities usually estimate the yearly amount of money laundered. According to the International Monetary Fund (IMF), approximately 2-5% of the global economy consists of laundered money. 81 It is difficult to estimate the amount of money laundered, hence there is no publication of figures anywhere concerning this. Owing to the amount of money laundered yearly, international organizations and governments are taking notable measures to detect, prevent and punish the law breakers in this regard. 82 Individuals, who own

⁸¹ Chatain, PL 2009, *Preventing Money Laundering and Terrorist Financing: A Practical Guide for Bank Supervisors*, Washington (DC), World Bank.

⁸² Chambers-Jones, C 2012, *Virtual Economies and Financial Crime: Money Laundering in Cyberspace*, Cheltenham, Edward Elgar.

'dirty money', usually hire experts in finance to help them change the 'status' of the illegally obtained money. Money laundering involves three stages, which are placement, layering and integration.⁸³

The first stage (*Placement stage*), involves introducing the illegally obtained money into a financial institution such as a bank, stock market or credit union. This, of course, involves risk because a deposit of a large sum of money may create suspicion within the bank. Banks ask a series of questions, including where the money came from, and other personal questions around the amount of money. Naylor (2005) supports this claim, indicating that it is a requirement for the bank to report any transaction that involves a lot of money, hence making it difficult for a criminal to deposit large sums of money.

The second stage (*Layering stage*), involves complex financial transactions which will conceal the 'dirty money' making it hard to

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⁸³ Platt, S 2015, Criminal Capital: How the Finance Industry Facilitates Crime. http://www.Palgraveconnect.Com/Doifinder/10.1057/9781137337306.

follow (Hopton 2009). According to Malisow and French (2008), layering may involve the transfer of money through different transactions so the form of money will be completely changed. The method used here, involves sending money from one bank to another, depositing and withdrawing to make the amount in the bank vary, changing the currency of the money and buying expensive items such as property and other methods. In this regard, it would be difficult for the relevant authority and the banks to trace the illegally obtained money.

The last stage (*Integration stage*), involves obtaining 'riches' generated from the transaction of illegal money. This allows the money launderer to use the money freely without any suspicion or being caught by law enforcement officials or the IRS. The money will re-enter into the economy in a form that is legitimate and usually presents as a 'transfer of money' to a final bank account of a locally owned business (*in which the criminal will be investing*).⁸⁴

⁸⁴ Chambers-Jones, C 2012, *Virtual Economies and Financial Crime: Money Laundering in Cyberspace*, Cheltenham, Edward Elgar.

Money laundering is also used for the funding of terrorist activities. Many organizations globally, are developing strategies against money laundering and terrorist financing. In the United States, the Department of Justice, the State Department, and the Federal Bureau of Investigation (FBI), are all involved in fighting money laundering. Owing to the globalization of financial systems, organizations such as the International Monetary Fund (IMF) and Financial Action Task Force on Money Laundering, also have separate divisions for anti-money-laundering.⁸⁵

Techniques used for money laundering

Criminals of money laundering are always developing new techniques that will help them to effectively commit their crime, including the 'Virtual's technique' outlined in this book. According to Chambers-Jones (2012), the primary technique used for money laundering is referred to as 'smurfing' which is also referred to as

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⁸⁵ Platt, S 2015, Criminal Capital: How the Finance Industry Facilitates Crime. http://www.Palgraveconnect.Com/Doifinder/10.1057/9781137337306.

'structuring deposits'. He continues by explaining that 'smurfing' involves the breakdown of large amounts of money (cash) into small amounts of money that are less suspicious. In the United States and Australia, AUSTRAC (Australian Transaction Reports and Analysis Centre) is the government agency responsible for Anti-Money Laundering and Counter-Terrorism Financing. AUSTRAC suggest that the smaller amounts of money, usually less than AUD\$10,000, is the amount where the bank will report particular transactions to the government. Through this technique the deposit of money occurs into more than one bank using different individuals over an extensive duration. 86 The 'smurfs' could be your Virtuals; hundreds of registered adults absorbing amounts of less than \$10,000 being paid by fictitious companies or other fictitious Virtuals. Remember, there is no risk to these Virtuals either spending your money or taking a cleaning cut. They do not exist and are under the criminal syndicate's control. They will not run to

⁸⁶ Unger, B & Busuioc, M 2007, *The Scale and Impacts of Money Laundering*, Cheltenham, UK, Edward Elgar.

the police and 'rat you out' and it keeps the principle of less people involved, therefore less risk.

Money launderers also use overseas banks to hide their funding; using banks that are willing to turn a 'blind-eye' towards large cash transactions. Taking this into consideration, money is sent to an offshore account in a country with bank secrecy laws, meaning there no restrictions on depositing funds, as the country usually allows unspecified banking. The Bahamas, Cayman Islands, Hong Kong, Panama, Switzerland and Singapore are the main offshore centers. Underground banking is also a technique that enables money laundering in many countries and these underground banking techniques are used heavily in Asia. According to Naylor (2005), countries such as Asia have a banking system that permits deposits, withdrawals as well as transfers of money that are not documented. In this regard, these systems operate outside of government control and they are 'trust-based' which leaves no evidence of operation as there is no documentation.

I once had an Asian colleague, who with his ten relatives put \$20,000 each into a kitty every year and took it in turns of withdrawing the lump sum each year over the 10 years using a lottery number system. Although there was no interest, or structured finance, the system was held together by trust and it gave the opportunity for investment into a restaurant, gaming café or a portfolio into the stock market for the players who withdrew the money early on into the arrangement. Laundered money easily flowed between these groups, because they operated cash businesses such as a cafe, restaurant or retail shop.

'Hawala methods' are used often between syndicates across country borders. For example, if you jump on a plane in the U.S. with USD\$300,000 cash in a suitcase and you don't want the authorities to know about it and then you land in France to give this money to your uncle, well it is very risky - the funds could be confiscated leaving the U.S. or entering France causing unnecessary attention on your business activities. Instead, trusted syndicates operating internationally, will take your \$300,000 cash, charge a

small fee and instruct the French syndicate to give your uncle \$300,000 cash on their end. The U.S. syndicate may appear to be cash heavy whilst the French syndicate \$300k light. With many transactions happening weekly, all books are balanced at each end. For example, the French syndicate will receive funds from people in Greece, Turkey, and France wanting to send money to relatives overseas in the U.S. The net result is 5% per transaction which is quite profitable, if you do a thousand of them annually.

Schott (2006) states that shell companies, which are 'fake', are usually established to enable money laundering by taking in the 'dirty cash' for payment for specific goods while in the real sense the goods are not provided. Platt (2015) supports this claim, indicating these companies make the transaction look legitimate by providing 'fake balance sheets and invoices'. However, this is not entirely true. Shell companies are used for a legitimate purpose. A company can use a shell company to protect themselves against frivolous lawsuits or protect their identity from criminals gauging their true wealth. They are a great vehicle for asset protection also.

They can be used to speed up a company registration in a region where it may be slow to set up a corporation.

Another key technique of money laundering, is investing in legitimate businesses so as to 'clean' the 'dirty' money. Businesses who take on investment, are less likely to ask questions that the bank would with regards to receiving large sums of money. Taking this into consideration, the money launderer may make use of big businesses such as casinos that involve a lot of money, thereby making it easier for the illegally obtained money to 'blend in'. On the other hand, Platt (2015) continues that the money launderer can equally use small businesses that are cash intensive such as car washes, like Breaking Bad, and bars. Consequently, money launderers can combine the 'dirty' money with the 'main' company's revenue making it hard to trace the original 'dirty' money. As a result, the company will register increased revenue, which is legitimate.

'Black Market Colombian Peso Exchange' is also a key technique which is a mechanism of laundering drug trafficking money.87 According to O'Kane (2007), there have been challenges for United States goods being imported illegally to Colombia through the black market. Taking this into consideration, an official from Colombia planned a meeting with the United States Treasury Department to discuss the illegality of importation of goods. The traffickers of drugs, gives the 'dirty' US dollars to a peso broker found in Colombia. Consequently, the peso broker will then use the drug money to buy goods in the United States for the importer from Colombia.88 When the importer gets the goods they sell them for pesos and they pay the peso broker from the money they receive. He further explains the drug trafficker will receive pesos from the peso broker of the original United States 'dirty dollars'.89

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⁸⁷ Platt, S 2015, *Criminal Capital: How the Finance Industry Facilitates Crime*. http://www.Palgraveconnect.Com/Doifinder/10.1057/9781137337306.

⁸⁸ Beare, ME & Schneider, S 2007, *Money Laundering in Canada: Chasing Dirty and Dangerous Dollars*, Toronto, University Of Toronto Press.

⁸⁹ Great Britain 2009, *Money Laundering and the Financing of Terrorism:* 19th *Report of Session 2008-09*, London, Stationery Office.

Money launderers also buy real estate using the illegal proceeds and then resell the property to establish cleansed funds. It can also be argued that the price of the property may be manipulated and be sold at low cost and then the criminal will receive the proceeds to compensate for the difference. This is another great example of where the **Virtuals** take advantage of this; **Virtuals** can sell real estate to other **Virtuals** so there is no loser in the transaction; it is just a way that finance can be moved from one entity to another.

A company may also have workers who are unregistered/ unqualified with no written contracts about their work conditions and what their monthly salaries might be. The 'dirty' proceeds are used as the salary payment to the unregistered workers, hence, another type of money laundering technique.⁹⁰

Another key technique used by the money launderer, is the use of casinos where the criminal will buy things such as chips with the 'dirty' cash expecting to take payment in a check. Criminals will

⁹⁰ O'Kane, RHT 2007, *Terrorism: [Of Groups, States and Nations]*, Harlow [U.A.], Longman.

then declare this money as 'gambling winnings' helping to launder the money. Money launderers also use trade-based laundering which entails undervaluing or overvaluing an invoice so that the movement of the proceeds is concealed, for example, selling office furniture for three times the value. Another method is a fake verbal loan.

The main purpose of laundering the money is to enable the holder of the 'dirty' cash to use the money privately or cleanly. Money launderers are increasingly embracing the technology to develop a mechanism of effectively laundering the 'dirty' proceeds and financial experts (some knowing and some not) are also playing a role in facilitating money laundering and consequently making it a major challenge to eliminate this problem.

Criminal/Terrorism financing and how the organization operates

Terrorism requires financing so that the objectives of the terrorists can be met; whether it be training, food, ammunition or travel

allowances, terrorists need a good influx of funds to be of any use to their mission. For a notable number of countries, financing of terrorist and money laundering poses a great challenge with regards to preventing, detecting and prosecuting this crime.91 Terrorists finance their activities through drug trafficking, poaching of animals (for example rhinos) and other contraband, as well as the selling of counterfeit goods. The goal of the terrorist is to compel or sway governments to change their stance by threatening parts of the population. Terrorists do this through massive killings or simply disrupting general activities and services in a country. Terrorists make use of financial institutions, such as banks, to ensure the money is always available when needed to commit crime.92

The United States has been at the forefront on fighting terrorism for the last few decades but the effort to destroy the financial

⁹¹ Hopton, D 2009, *Money Laundering: A Concise Guide for all Business*, Surrey, England, Gower Pub.

http://Public.Eblib.Com/Choice/Publicfullrecord.Aspx?P=446447.

⁹² Schott, PA 2006, *Reference Guide to Anti-Money Laundering and Combating the Financing of Terrorism*, Washington, DC, World Bank [U.A.].

networks of terrorists has been futile, hence, Washington has made it a strategy to continue fighting the terrorists. Approximately USD\$140million assets of terrorists have been frozen; including 1400 accounts, internationally. In addition, he states terrorists are now developing means of laundering money or simply use cash as well as the use of 'front' or 'fake' companies.⁹³

Firstly, according to Unger and Busuioc (2007), practices used in Muslim cultures, such as donations to charities and informal money transfer centers, makes it hard to trace the links of terrorist financing. In this regard, he states donations are the largest terrorist funding source, derived mainly from rich individuals and charities. According to the CFR (Council on Foreign Relations) Task Force Report 2002, wealthy individuals and charities were the largest source of funding for the Al-Qaeda Group.

Secondly, terrorists also get their money through illegal activities (Beare & Schneider 2007). According to Naylor (2005), drug

⁹³ Chatain, PL 2009, Preventing Money Laundering and Terrorist Financing: A Practical Guide for Bank Supervisors, Washington (DC), World Bank.

trafficking is the largest source of terrorists funding. This can be seen from the Afghan farmers destroying their normal wheat crops and replacing them with opium poppies. The opium is then used by the terrorists to sell to the western markets in the form of Heroin.

Most terrorist groups support themselves through illegal business. Great (2009) demonstrates this in the case of the 1993 bombing of The World Trade Centre – the terrorists obtained the money by selling counterfeit t-shirts in New York. Schott (2006) also gives an example, whereby the terrorists behind the 2004 Madrid train bombing raised the money by selling counterfeit CDs and selling illicit drugs. It is therefore evident that illegal trading is playing a fundamental role in supporting terrorist activities globally. The Revolutionary Armed Forces of Colombia have been financing their operation through trading in cocaine and also other groups in the various countries are also using drug trafficking to support their activities.94

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⁹⁴ Malisow, B & French, JL 2008, *Terrorism*, New York, NY, Chelsea House.

Thirdly, front companies also play a fundamental role in financing terrorist activities worldwide. Terrorist based organizations usually try to operate as legitimate businesses for longevity and not draw attention so they can obtain profit and consequently support their activities. O'Kane (2007) argues the business of livestock, fish and leather, has been used by terrorists to generate cash for funding their activities, including Osama bin Laden, who owned various retail outlets of honey stores in the Middle East and Pakistan. The honey served mainly two purposes; it was generating revenue as well as disguising the shipment of weapons and money. Generally, terrorists transfer their money through shell companies when not using financial institutions.95 Taking this into consideration, approximately ten percent of the world GDP constitutes laundered money.

The cost of the bombing of the Madrid train in year 2004 was approximately USD\$15,000 (according to UN estimates).⁹⁶ In the

⁹⁵ Malisow, B & French, JL 2008, *Terrorism*, New York, NY, Chelsea House.

⁹⁶ O'Kane, RHT 2007, *Terrorism:* [Of Groups, States and Nations], Harlow [U.A.], Longman.

case of the bombing of a Bali nightclub, the cost was approximately USD\$50,000 to execute. What this does confirm, is that terrorists need money to carry out their operations.

A report by the Australian Transaction Reports and Analysis Centre found that money was being transferred to Somalia to finance a group of terrorist known as 'Al Shabaab'. O'Kane (2007) supports this claim indicating that money was transferred using false identities. Consequently, in 2015, the Australian government stopped all money transfers to Somalia.

Though terrorism and criminal syndicates may seem like a world apart in terms of goals, the 'making' and success of each group is linked to their ability to acquire funds, usually drugs, and once they possess the cash, how to spend it without getting caught; and the key to this is money laundering. When criminals and terrorists start using techniques in the baby harvest, such as risky share trading and using money laundering through fictitious shelf babies, it will become more and more difficult and entangled to track down the culprit; especially when the **Virtual** does not exist...only on paper.

The legal/accounting phrase 'piercing the veil' is a term used by lawyers to determine the true owner or the person receiving benefits from a Shell corporation. If the veil is pierced and a **Virtual** exists as the benefactor, the case against the **Virtual** will come to a grinding halt. By placing an untainted **Virtual** as the beneficiary of a Shell corporation an extra veil is created. In fact, having a **Virtual** owning a **Virtual** Corporation with a Shell/Shelf Company is a decent protection mechanism against law enforcement.

Combating money laundering and criminal financing

Combating money laundering and deciphering 'real' money from 'dirty' money is a never-ending global problem, getting made more and more difficult with technologies such as bitcoin. It is no longer simply a criminal money activity where a criminal gets to drive the streets in a new BMW. With the huge losses of lives at stake, the pressure is on investigators to discover the sender and recipient of the laundered money. If a mistake is made, it simply means that many lives could be lost.

The government and non-governmental organizations aggressively establishing mechanisms to control money laundering and terrorism funding by legislation and law enforcement. O'Kane (2007) said the Bank Secrecy Act (1970) usually eradicates anonymous banking and gives the Treasury Department power to compel all the banks and financial institutions to record all transactions, making it simpler to identity any laundering transaction. Taking this into consideration, he states that any bank official who goes against this rule can serve a jail term of approximately ten years in the United States. Unger and Busuioc (2007), explain that in year 2001, the Unites States Patriot Act established the checking of bank patrons (which is mandatory) and also ordered that the bank provide records which will enable tracing and revealing the identity of an individual involved in a specific transaction. O'Kane (2007) asserted that some of the suspicious activity that would be related to terrorism financing, is an individual owning various accounts and receiving money into the accounts and later transferring the money to another account.

He argues that banks and financial operators should be keen to note such activities.

According to Naylor (2005), no individual nation can completely fight this problem alone and hence an international organization known as Financial Action Task Force is used to specifically fight money laundering. Platt (2015) endorses this by indicating approximately thirty-three member states that are usually in this organization and that an anti-money laundering standard has been established to regulate the banks. In this regard, some of the recommendations include: the banks carrying out background checks on money deposited and reporting any doubtful transaction.

A Canadian member of the legal profession is not allowed to receive cash that is above CAD\$7,500; this is to prevent the money launderer from using their trust account for illicit activities. Professionals should clearly know and verify their clients to avoid dealing with a money launderer and only members whose identity

can be ascertained should receive legal advice from a member of 'said' profession.

Governments are also experiencing challenges in fighting terrorist financing because terrorists are now using cash; leaving no bank account evidence. This includes smuggling in items such as gold or cash. O'Kane (2007) explains that terrorists are also using a domestic source of money to plan and fund attacks. He highlights this in the case of the bombing in London (which was designed in Britain), where British people gave the money to finance the attack. Taking this into consideration, it became harder to trace the financial activities as this was all done locally with no overseas transfers for agencies to detect. According to Malisow and French (2008), the enforcing of financial law has also been challenging. The spend approximately USD\$430million United banks States annually, in an attempt to comply with anti-money and terror laws. He furthers states that the number of suspicious activities the United States Department of Treasury has identified, has substantially increased over the past few years.

Conclusion

It is evident money laundering and criminal financing is increasing worldwide with a high number of crimes occurring. This chapter has outlined the concept of money laundering and techniques used to clean the 'dirty' money. Taking this into consideration, money launders use simple means of cleaning money such as the use of casinos and front companies whereby they carry out legitimate business. Different scholars have also explained how terrorists obtain money for sustainability and for funding their activities and organizations. For instance, terrorists receive funds through charities and donations, sometimes domestically. Alternatively, they also get funded by engaging in illegal business such as kidnapping and drug trafficking. Terrorism has had a negative impact on economic development, hence lowering a country's revenues by a large percentage. Different countries therefore, come together to fight terrorism and money laundering, which is substantially important in this regard. Various scholars have also stated that terrorists are vigilant in identifying government acts and plans, hence they accordingly change their operations. Despite the challenges in fighting terrorism, governments of various countries are forming counter-organizations and establishing legislation to combat terrorism. Lastly, every individual has a role to play in fighting terrorism.

It can be seen from this chapter that investigators are clearly focusing on drug money, with a reliance on professionals to capture illicit activity from their clients' money reporting. They are looking at it from a 'traditional' approach. The Shelf baby Virtual concept is designed not to operate under these conditions. A Virtual has had a bank account with the bank for over twenty-five years, and has applied for a school/student loan, a car loan a house loan, received an income from a good job and has paid the normal amount of taxes. This is your average Joe, no large deposits, steady income streams, normal debt ratios and the ability to obtain credit. A Virtual that fits this model will not raise any red flags and is the one we should be most afraid of; they are virtually undetectable, and have nothing to lose, because they don't exist.

Virtual Paper trail

Introduction

Meticulous recording keeping of all your **Virtual's** documentation and storing of the documents is crucial for your **Virtual** to be a success. It is this attention to detail that will ensure there are no mistakes in applying for loans, insurance or other services. When you are dealing with hundreds of faceless identities there is no margin for error. Having a **Virtual**, with fictitious employment working for a shelf company, makes it very difficult to visualize who and what is working where. Not forgetting these **Virtuals** will marry other **Virtuals** and birth **Virtual** children spanning the next generation.

Meticulous record keeping takes into consideration a precise documentation and recording of their life events. Your investment and hard work documenting this process will be realized by the benefits associated with proper documentation and recording of the events that surround them when it comes to the harvest. Think

of it this way, after the creation and storage of an individual for 25 years, you will need tax filing history documentation, employment contracts, loan applications, bank statements, life insurance policies, marriage certificates and everything else an individual obtains in their lifetime. You would potentially be looking after hundreds of identities and their paperwork.

Not only that, but someone will need to log on with every **Virtual's** internet banking credentials so they don't expire, pay bills, ensure cell phone details are up to date, and pay housing rates for the **Virtual** property owners. This is one of the hardest jobs ever, it's hard enough looking after your own financial affairs, and will require a team.

Companies, governments and organizations have taken upon themselves to carefully record their activities and do this for business control and legislation with teams of staff. In this regard, many businesses and organizations hire specialists in record keeping to enhance control and organization. This is no different from the **Virtual** army management. Specialists within the

syndicate must control all of this documentation to ensure life insurance premiums are paid, bank loans are applied for, company profit/loss records are filed and **Virtual** salaries are paid from laundered money.

consideration when Integrity should be a carrying out documentation as well as the storing of documents. Therefore, this chapter aims at exploring the concept of meticulous documentation and storage of documents. Secondly it focuses on the methods used to store the documents safely and for easy retrieval once the need arises. We look into both the traditional paper filing cabinet methods and also introduce you to the encrypted cloud-based method accessible anywhere in the world. It also looks at the importance of precise documentation and record keeping as well as the means of retrieving information.

Concept of meticulous documentation and storing of documents

The need to properly document and store records cannot be overemphasized. Events and specific individual information need to be carefully documented and stored so that they can act as a source of evidence. When you're **Virtual** is applying for a real estate loan, or for life insurance, details presented to the bank or broker must be perfect without any detail being questioned.

Taking this into consideration, many experts and specialists are offering services in documentation and recording. Documentation helps to build up a detail evidence of what has been happening and this substantially helps in planning for businesses and organizations. Feffective documentation will ensure proper storage of records and retrieval of the information upon request. A good management policy of record keeping is important when considering documentation. Documents kept should be stored and

⁹⁷ Sidell, N 2011, Social Work Documentation: A Guide to Strengthening Your Case Recording, Washington, DC, NASW Press.

properly managed. Information is an asset for the syndicate, therefore proper documentation and storage is required.

A system for the storage of important personal records/documents is required - such as a child's schooling or photos taken in an event. The filing system adopted should be reviewed annually to discard documents that are no longer necessary, however, instead of removing them, they should be archived. A cabinet drawer can simply be used to store important documents of the family. Accordion folders, which usually utilize a small space in the room, can also be used to store important documents. This would work for single **Virtuals** but not an army of a 1000 or more.

Record keeping is an area that is usually overlooked when it comes to a home filing system. According to a Consumer Reports National Research Center, approximately one in four Americans have lost a financial document and only about forty percent of these individuals could locate a document when the need arises. ⁹⁸ The main reason that makes an individual store documents is for easy

⁹⁸ Gitelman, L 2014, *Paper Knowledge: Toward a Media History of Documents.*

access and keeping the information safe from fire or theft. There are various methods that an individual can use to make sure the documents are safe and easy to access.

Firstly, use of a safe deposit box, which is suitable for storing original documents such as birth certificates. These boxes are made available by the bank, and being a customer, you may get a discount on the box. The box is usually kept at the bank and therefore, in case a document is needed, an individual needs to visit the bank prior to this. After putting the documents in plastic sleeves you can now keep them in a box that then goes inside the safe. Protection of documents involves physical maintenance of records, mainly to meet organizational needs. Accountability is a key requirement for the individual who is responsible for storing documents. This is a valid option for small numbers of **Virtuals**.

Methods of record keeping

There are various methods that can be adopted for storing details and information regarding an event. Taking this into consideration, the method adopted should not be complex so that keeping up to date is easy. The key principle that guides selection of the method used is the cost. In this regard, the technique should be cost effective with careful consideration of the cost-benefit analysis. Secondly, the method should offer easy retrieval of the details.⁹⁹ For instance, a method used to store patient records in a hospital should not be overly sophisticated, allowing easy retrieval of the patient's details. This will consequently allow a smooth flow of activities and enhance the coordination of various operations. Accuracy and reliability are also an important aspect when considering the method to use for data recording. The method should be highly reliable and accurate, ensuring effective and efficient storage. 100 The method should also meet your needs,

⁹⁹ Sidell, N 2011, *Social Work Documentation: A Guide to Strengthening Your Case Recording*, Washington, DC, NASW Press.

¹⁰⁰ Caruso, IB 2006, *The everything home storage solutions book*, Avon, MA, Adams Media.

which is a key necessity. Records should be kept in a secure place to reduce the chances of loss.

The main method used in record keeping is electronic recording. A computerized system takes into consideration the use of an electronic device such as a computer to store important records. The success and sustainability of any business and organization is proper record keeping. Commercial software is usually used for keeping accounting records, such as software like Quicken. However for a Virtual, both an accounting type of software and a database is required to store photos, identification and reports. For instance, a school may opt to choose an electronic method of storing the children's information on performance assessments, personal details, and examination results. I am not saying you need to record the details of a Virtual's fingerprinting activities but some thought should be given to childhood photos. Also, artwork may come in handy if an insurance or social security payment fraud investigator comes knocking.

Innovation in technology is developing very fast, making individuals and businesses adopt modern technological methods of storing information. The newly developed devices such as a laptop and IPad, among others, are being used for data recording storage. In this regard, these devices serve the purpose of recording information.

The various factors that are considered when storing documents in a school setup include the security of the records. The system adopted should be secure and not prone to being manipulated or prone to theft. Secondly, the accessibility of the information as well as the effectiveness of the method of storing documents should also be a determining factor.¹⁰¹

One of the primary advantages of electronic data recording and storage is efficiency. Computerized systems offer high efficiency in data recording and keeping where the chances of loss of the information is eliminated. An electronic method of storing information keeps the information safe and in the case of fire, the

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¹⁰¹ Gitelman, L 2014, Paper Knowledge: Toward a Media History of Documents.

information will not be lost. Unlike a paper-based method of data recording, which makes the data prone to loss and the backing up of information very difficult. Secondly, little space is required to store a large amount of data. Taking into account that an individual requires only one electronic device to record and keep the data, many organizations and individuals are adopting this method for data keeping.

Security of documents is assured as the electronic system is usually encrypted with authentication systems and passwords. This helps to safeguard confidential information unlike in the paper-based method where files are kept in secure cabinets and can manually be accessed. Usually, files go missing and confidential data may be released, unlike in the electronic system where there is no theft of data. With an electronic system, it is usually best to search a text because when a document is scanned, the OCR examines the text and creates a version which is digital, making searching of files easy.

Financial records are very sensitive to a company as they can easily be manipulated causing losses. Therefore, many managers are adopting computerized systems of data keeping ensuring safety of these records. A back up of information is key when using computerized systems. A business can use CDs and a memory stick to back up their information to prevent loss.

However, they are disadvantages associated with the electronic method of storing records. An individual or a company needs to invest heavily in these devices and the cost may at times be higher than the benefits. Therefore, if a company is planning on using a computerized system, it may need adequate capital to train its personnel. Additionally, if the device gets lost and there was no back up of data, a large amount of information will get lost rendering this method unsuccessful. Therefore, careful consideration is required when adopting an electronic method of storing information.

Cloud computing is also an option for storing information online.

Using encrypted Cloud solutions like "Spider Oak" will ensure the

information remains private from investigating officers. Cloud computing enables an individual to access the information virtually hence offering flexibility and a global means of accessing the data anywhere. This creates a competitive advantage for the companies using this as they can easily market their product by accessing the information pertaining to the product online. The main benefit of this technique is that the stored information cannot be damaged and retrieval is also easier.

Some organizations may opt for the paper-based method of storing data. This method consists of recording and storing data manually. Manual recording is a cheaper option for smaller operations. The risk of losing data is minimal if the data is stored in a fire-proof filing cabinet. This makes this method popular among many individuals and business people taking into account the cost of using it. The process of recording and record keeping is easier, therefore no skill is required as opposed to the electronic method, which requires skills, and also the likelihood of corrupted data is eliminated. For the purpose of streamlining the manual system, all original

documents should be kept and the exact dates of correspondence properly recorded. In the paper-based method, the area of storage should be free from humidity and should be stored in a diligent manner. The files should also be protected from mold to reduce damage. This will substantially increase the longevity of the document store.

A problem with the paper-based method is that it's time consuming and prone to theft. In this regard, a lot of time is consumed storing the information on paper. Retrieval of data is also hard compared to the electronic method which takes very little time. An individual needs to open various documents before the required document is retrieved, consuming a lot of time. In case a disaster such as fire occurs, all the evidence of documentation is lost. In the case of identity documents, the original must be kept and a scanned copy just for a backup, so there still needs to be some manual storage of original documents such as a birth certificate.

Importance of proper storage of documents

Proper documentation, as well as storage of documents, plays a substantial role in day-to-day life. We find ourselves in activities that require us to document events and store the documents. The sustainability, as well as success, of organization depends heavily on meticulous documentation and safety of the records. 102 It is of paramount importance to accurately document and keep the records safely. Many individuals rarely take enough consideration when it comes to the keeping of records until an emergency arises. Organizations need to understand the importance of proper documentation as well as record keeping because both act as a source of success. This is because these documents are mostly used as a source of reference.

¹⁰² Somasundaram, G & Shrivastava, A 2009, *Information Storage and Management Storing, Managing, and Protecting Digital Information*, Indianapolis, Ind, Wiley Pub.

http://www.Books24x7.Com/Marc.Asp?Bookid=29595.

Records help in the settlement of estates, insurance, as well as benefit claims. 103 In order for the insurance company to settle the claim they ought to have proper documentation and accurate records in place to ease the work of settling these claims. Therefore, records help to shorten the time required to settle claims. In the case of a death, records may be required to establish ownership, hence the need for proper storage of records. 104 Equally important, past records on spending can help plan future spending by avoiding unnecessary shopping. Secondly, record keeping aids in monitoring the progress of the business - records usually indicate the sales of the business as well as indicating the areas that require change. Therefore, proper documentation and storage of records can substantially increase the success of the business. Many business people are therefore adopting effective methods of storing their records.

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¹⁰³ Davies, JA 2011, *Implementing Ssl/Tls Using Cryptography And Pki*, Hoboken, N.J., Wiley. http://www.Books24x7.Com/Marc.Asp?Bookid=40694.

¹⁰⁴ Gitelman, L 2014, *Paper Knowledge: Toward a Media History of Documents*.

Preparation of financial records depends heavily on records that have accurately been recorded and stored. The financial statements, such as income statements, show the income and expenses of the business, hence acting as a road map to the success of the company. Proper documentation can also help in identifying the source of the income of the business as well as keeping track of deductible expenses. Records act as evidence in a court of law.

Good records are important when paying taxes. From doing this, an individual or a business will avoid underpaying or overpaying tax.

Good records are equally important for internal audits as they act as a source of evidence in case the auditor doubts something.

Owing to the fact that records are important, many organizations are now keen on record keeping as well as precise documentation.

Documentation keeps things real as writing is an efficient tool of memory. Usually documentation enables proof that an event occurred.

Proper documentation and record keeping enables analysis of the company. In this regard, changes of process can easily be identified.

For instance, if the management had made a lot of sales previously, documents kept can be used to identify the decision that had been made at that time. Therefore, record keeping facilitates the smooth flow of a company's activities. It also gives a company a competitive edge through marketing. Documentation and record keeping also reduce operational ambiguity. This is because if there is a challenge about how a particular task was performed, documentation can be used as a reference to identify those issues.

Last Will and Testament

Part of the planning and paperwork, is the importance of keeping accurate records as if the **Virtual** was indeed a 'real person'. This includes a Last Will and Testament because the **Virtual** will need to be harvested when it is ready. The legal Will document will make declarations from the **Virtual** on what assets including money, life insurance and property will be transferred to whom. The obvious

¹⁰⁵ Davies, JA 2011, *Implementing Ssl/Tls using Cryptography and Pki*, Hoboken, N.J., Wiley. http://www.Books24x7.Com/Marc.Asp?Bookid=40694.

options are to a Virtual spouse, family members or friends of the syndicate. The Will can be done by a lawyer or through an online do-it-yourself template website. It is important for the Virtual's accountant/paperwork/lawyer (handler) to ensure the Last Will and Testament is not just a static document written the day before a Virtual is 'killed off'. The 'Handler' should ensure that every 5-10 years, whether required or not, an updated Will is put on file to show any interested parties, that for all intents and purposes, that the person exists and the 'Will' reflects the assets acquired gradually over a lifetime. For example, when I was 18 years old, I had \$100 to my name and a car (actually the car was probably worth less than the \$100). At the age of 30, I had two cars, cash, stocks, a house and a life insurance policy. Your Virtual's 'handler' should ensure Wills are updated according to standard asset acquisition. This could be the addition of life insurance, cash from another dead Virtual or income from a business (laundering). Ensure, in the Will, that an executor is nominated. The executor's role is to ensure the **Virtual's** life is shut down completely.

As the executor of a Will covered in the death chapter, this will need to be a real person in the syndicate - it is your role to shut down the **Virtual's** assets that have been acquired. Now that you possess a Will and a Death Certificate, you can use these documents to shut down your **Virtual's** life. So what does an executor actually need to do?

The executor will need to shut down the **Virtual's** Bank accounts, notify the TAX/IRS Department of the passing/death of the **Virtual**. You will need to notify the Driving authority, Life Insurance Company, employment and so on. When you are managing 300 **Virtuals** over 70–100 years, this is the reason why it is so important to have paperwork and a file on your **Virtual** to shut down their lives correctly. Being an executor of a Will does take some time and must be done properly.

Social Media

Other things need to be taken care of. Is there any social media that was created in the victims lives? Such as accounts created in Facebook, Twitter, Linked-In pages? These should be removed after the death of an individual. The **Virtual's** 'Handler' will have all the log ons/passwords for this function. Do not shut them down the day after Death, but gradually over 3-6 months after the passing. For any sticky-nose detectives or life insurance investigators, you need to keep up the appearance that you are in 'mourning' and that shutting down Facebook is the last thing on your mind right now at this vulnerable time.

Conclusion

In conclusion, it is evident that meticulous documentation as well as proper record keeping is important for the **Virtual's** success. Even though this chapter sounds a little mundane and boring it is the most important chapter in this book to ensure your **Virtual** is a

success. It is hard enough keeping track of your own birth certificate or passport but imagine looking after a few hundred of these Virtuals. The adopted techniques have made it easier to access records to a considerable extent. The major methods used for record keeping are the electronic method as well as the paperbased method. I don't favor electronic over paper-based methods as long as the Virtuals are documented, not forgotten and stored safely. Sure, the development of the new technology has made many people and business entities move from paper-based recording to electronic recordings and this has its attractions. Computerized record keeping has made the work easier, and has helped the smooth running of the company activities. However documents such as Birth certificates, passports and driver's licenses must be kept in their original form somewhere. I would recommend a combination of the two. A fireproof filing cabinet for original documents and a computerized system where everything is scanned and stored, mirroring an enterprise environment. The computerized system allows the triggering of events such as life

premiums to be paid, time for harvesting, and an expiration date of stock options.

There are numerous benefits associated with proper documentation and record keeping. For instance, stored records can act as a proof in case of legal challenges or disputes as well as loan documentation and life insurance. The integrity of the records should also be protected to enhance accuracy and completeness.

Virtuals and the Stock Market

Introduction

The modern day stock market is a paradise for the Virtual. Imagine placing a position on the stock market and it's not your money you lose; with enough Virtuals you can make only winning trades. In this chapter, we look at the general stock market and focus deeper on derivatives and highly-leveraged trading. Finance products such as leveraging and derivatives can be hard to grasp. There is plenty of material online to assist you if it becomes overwhelming. Think of it this way, I have \$1,000. Using currency trading I can invest \$1,000 of my own money and leverage my position to 1:100. I am now trading with \$100,000 exposure. That's great if my trade makes money but really bad if I lose......But what if I used Virtuals? I bankrupt the losers and celebrate the winners. I take the risk out of the equation. Risk equals reward, but what if we took away the risk.

We then take it one step forward and look into the details of the 2010 'Flash crash'; whereby a trader submitted fake trades to flesh out the 'real' buy/sell price and helped cause the stock market to drop 9% or rather multitrillions of dollars in value. It is these techniques, where the **Virtual** can be used to make the most amount of money in this book. With this in mind, the focus on this chapter will be on the stock market and the risky components that are involved as well as how one can use **Virtuals** for the ultimate financial advantage.

Stock market overview

The stock market, or sometimes called the stock exchange, acts as both primary and secondary markets. As primary markets, governments, municipalities and corporations raise capital by putting the savings from investors to productive ventures. In secondary markets, securities are bought from other investors for cash. This has an impact of lowering the investment risk as well as maintaining liquidity in the system. Traditionally, exchanges were

conducted on trading floors. However, in the modern era with high speed computers and communications trading online at home or from a business, it has never been easier.

Risk overview and market factors

The most commonly asked question in the financial sector is, "How persistent is an investment risk across the time horizon?" Young investors, for example, are advised to put more into equities than the persons who are nearing their retirement age. In the U.S. for instance, equities appear to be systematically less risky when compared with equities of other various markets. The Federal Reserve System (FED) in 2012, announced that about \$85 billion U.S. of treasury bills would be purchased on a monthly basis, to aid the economy with post-crises of the 2008 Global Financial Crisis. On the following day, as noted by Koutmos (2013), the response on the stock markets was positive. The indexes of Turkish, British, and Russian stock markets, as noted by them, rose by 1.3%, 1.3%, and 4.2%, respectively. Following this macro-economic news in the

U.S., stock return conditional volatility was affected in various emerging markets such as Mexico, Korea, Singapore, Poland, and Turkey, among others. Stock market fluctuations are of a greatest interest to researchers and one of the factors that can result in a risk in this area is economic news announcements (Financial Derivatives 2005). In studying the Japanese macro-economic news, it was found the volatility of the Japanese stock market was only 0.1%.

Owing to the fact there is integration in most economies, macroeconomic news in major economies such as the U.S., Japan and the
European Union also affects financial markets in other countries.
Wadhwani (2009) explains that stock markets in the Czech Republic
are impacted more by the U.S. macro-economic announcements
than those from the European Union. Contrary to this, Polish and
Hungarian stock markets are impacted more by the European
Union announcements than the U.S. announcements. Further
studies indicate, there is a higher increase in risks in the emerging
markets as they are affected by major market announcements in

which they are integrated. This, therefore, implies the investors, whose stocks are at risk, must make informed decisions so as to make gains despite all of the risks involved. One of the most common ways used is hedging.

Why prices of shares go up and down

The reason prices of shares keep going up and down is that people are in need of either buying or selling shares. It is like buying something off eBay and selling it - you may have bought a classic Mustang car for \$20,000 from a seller who needed the funds for a house payment and re-listed it and sold it for \$22,000. As long as there is a buyer at the higher or lower price the new price has now been set. It is the same with shares, if no one is buying or selling, the stock price stays the same. According to Whaley (2008), the need for people to buy rather than sell shares make the buyers bid at high prices, thereby making the prices of shares go up. On the other hand, when people prefer selling than buying, the prices of shares go down because sellers will accept a lower price so as to

sell quickly. Apart from either buying or selling, or simply, supply and demand, there are other factors which might fluctuate the prices of shares.

Kiymaz (2013) indicates interest rates can be one of the factors. He explains that high interest rates increase the costs incurred by the company and therefore, it becomes more problematic for those companies that have a lot of debts. This is true because they will spend a lot of money paying off their debts and are left with little money to operate. To raise additional funds would cause the company to raise the price of their shares and would therefore turn away to other companies. Exchange rates are another factor that affects the share market as a whole. Increases in exchange rates make an investor buy less shares, compared to what he would have bought or sold before the exchange rates went up (Whaley 2008). (This is one of the reasons the stock market in the U.S. at the time of writing this book in 2015 is so high).

With interest rates so low, companies have the flexibility and ease of borrowing more funds at a low rate or paying off existing debts

at a low rate. There may be 'storms-ahead' for some companies who borrow large amounts of debt to stay afloat when interest rates start rising. A million dollar loan at 2% interest is quite easy to service but at 10% the interest rate starts to hurt a company's profit sheet.

Virtual TIP: Many kids get parcels of shares from their parents as an investment for when they are older, like buying Apple stock or Citibank knowing it won't be touched until the child is 18-21 years old. Whilst your Virtual is awaiting maturity, a smarter idea would be to use laundered money funds and buy \$20,000 worth of stock for your children annually. By the time they reach twenty years of age, your Virtual may already own between \$200,000 and a million dollar stock portfolio of laundered clean money.

Government policies will additionally have an effect on the prices of shares. Government policies, for instance 'taxation', will reduce the profitability index of the companies. If the policy involved raising taxes, the additional tax paid by investors will directly impact the investments chosen by them in future. Additionally,

how the government spends its money will also affect the share market as a whole. As argued by Hettenhouse and Puglisi (2011), other economies and financial markets also play a role in the prices of the shares on a global perspective. Take for instance the Australian share market, which is one of the global economies. The Australian share market is influenced by the activities that are carried out in the U.S. Additionally, due to the dependent nature that Australia has on export to other countries, movements in the overseas share markets would therefore impact the Australian share market. In 2011, the Australian share market was affected by the economic state, as well as debt, of the U.S. and Europe. The dependence on overseas markets puts the investor with shares at risk; since activities such as terrorism or political instability in other countries can lead to lower prices in shares.

Derivatives

Derivatives are financial contracts and their values are derived from a spot price, normally regarded as the underlying. 106 Globally, derivatives are an integral part in the financial system; the most important contracts being 'options' and 'futures' while 'commodities', 'equities' and 'treasury bills' are regarded as being the most important or mostly used underlying markets. The most traded derivatives are futures and options and these will be further discussed in this chapter. An option gives the holder the right, but not the obligation, to sell or buy the underlying at a given price (strike price) and stated date (expiration date). As will be discussed later, options are either named 'call' (buy) or 'put' (sell). Additionally, according to their type of exercise, options can either be an American or European. American options can be exercised any time an investor wishes, including at the expiration date.

¹⁰⁶ Batten, J & Ellis, C 2009, Technical trading system performance in the Australian share market: Some empirical evidence, *Asia Pacific Journal of Management*, 87-99.

European options on the other hand are only exercised on their expiration date.

The effect of introducing futures trading was examined in markets in Hong Kong, the U.S., Australia, Japan, and the U.K. on the volatility of these markets. It was after the introduction of futures trading when there was an increase in the stock market's volatility in all the markets apart from those in Hong Kong and Australia. On the contrary, the suggestion in other studies is that volatility decreased relatively after future markets were introduced. The main function of derivatives, however, as stated by Koutmos (2013), is to satisfy the demand that is for cost-effective protection against the risks that are a result of price variations in the underlying asset. The users of derivatives hedge against price fluctuations in interest and exchange rates, commodity prices as well as equity markets. Participants entering the derivatives market can be categorized as either 'speculators' or 'hedgers'. By protecting adverse variations in the values of the assets, 'hedgers' are therefore able to maintain high gains as any loss which might occur is covered by other gains. On the other hand, speculators tend to make high gains by speculating changes in the prices of the stock. However, the activities of the speculators are risky and would potentially lead to losses at any time. ¹⁰⁷ Apart from hedging and speculating, investors and other firms gain better financial terms by using derivatives.

Options

Options are contracts giving the owner the right, and not an obligation, to sell or buy underlying assets at a given price and at a certain stated date. The buyer of an option will pay the premium and thereby acquires the right to exercise the option while the option writer receives the premium of the option and therefore acquires the right to either buy or sell the asset in case the buyer

 $^{^{107}}$ Koutmos, G 2013, Dynamic interactions between stock and foreign exchange markets, *Global Business and Economics Review*, 143-143.

¹⁰⁸ Kiymaz, H 2013, The stock market rumours and stock prices: A test of price pressure and size effect in an emerging market, *Applied Financial Economics*, 469-474.

exercises it to the investor. Options are either said to be 'put' or 'call' options.

Call options

A call option is a security that enables the owner to have the right to purchase a hundred shares of stock for a given price and stated date. 109 The stated date is the expiration date while the given price is referred to as the strike price. The option in the call option is the right by the owner to purchase the underlying index. As stated by Whaley (2008), it is called a 'call' as it enables the owner to "call stock away" from the person selling it. He additionally states the person who owns the option does not buy the stock or exercise the option for which he has right, in the case of purchasing the stock that is unprofitable at the strike price. Therefore, this guarantees the owner of his money and will enable him to make high gains when the purchasing of stock will yield maximum profits. Owning a

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¹⁰⁹ Rjoub, S 2013, Before the crises: Implication for the US stock market, *International Journal of Trade and Global Markets*, 1-1.

call option can make the profits of the owner unlimited while the loss, to the amount paid on the option, is limited. Dev (2010) argues that owning an option is less expensive than being the owner of the stock. When the owner knows that the stock is about to rise, it becomes more profitable to have the rights to 'call' than to own a stock itself. Ball, Brown and Finn (2007), explain the owner is given the right by call options to purchase stock at a price which is fixed, thereby, allowing the owner to lock in a maximum buying price for the stock. Just like stocks, calls are traded on an exchange. The description by Jorion (2010) is that options, just like stocks, have both bid and ask prices, the volumes on options are lower than those on stocks, the spread between 'ask' price and the 'bid' price is more than the spread 'bid' and 'ask' prices on the stock, therefore, ensuring more profits to the owners.

Put options

Conversely, a put option differs from a call option in that the former is the right by the owner to sell underlying stock while the latter gives the owner the right to buying underlying index or stock. 110 Taylor (2012) describes a put option as a security, bought by an investor when he or she thinks or speculates the price of an index is going to decline. He continues that a put option gives the owner the mandate to sell a hundred shares of index at a given price and by a stated date. Just like the call option, it has the both the strike price and the expiration date. By calling it a 'put' option, the owner is given the right to sell the stock to someone else. For Hettenhouse and Puglisi (2011), a put option enables the owner to lock in a minimum price for selling an index. Furthermore, they explain the selling price is at a minimum because in case the strike price of the owner is lower than the market price, the owner would therefore sell the index at a price, which is above the market price and would

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¹¹⁰ Taylor, S 2012, Put-Call Parity: Evidence from the Australian Options Market, *Australian Journal of Management*, 203-216.

not exercise it. To make high gains from a put, an investor can write a call option on the index, purchase a put option on the index or short the index or stock. Many investors would not consider buying stock in instances where they think the prices will go down; instead they would opt to sell all the stock and wait for it to drop further so that they can purchase the stock back a lower price. However, Taylor (2012) feels that this strategy is not appropriate as the profits gained from the sale would be huge and would be subject to taxation, thereby making the profit margin too low.

The strategy to make high gains, as stated by Whaley (2008), involves buying a put option if an investor speculates the prices will go down for a short term, but the investor still wants to hold it in the long term. His explanation for higher gains is that taxes imposed on the put trade are lower compared to the taxes that would be paid on the stock, where the investor had purchased the index at a much lower price.

Making gains with options

Imagine that Yahoo stock 'YHOO' is at \$50 and an investor speculates the price is going to rise to \$60 in a few weeks to come. To make gains from this speculation, an investor would buy 100 shares of YHOO at \$50 and would later sell them when they rise to \$60. The total cost incurred by the investor would be \$5,000 and after selling the 100 shares the investor would receive \$6,000. The total profits made by the investor would amount to \$1000 or 20% return. Considering a 20% return is a great win to any investor, it should be good if that investor tracks and reads the options at YHOO that would yield to a higher profit margin of about 400% on an investment similar to that one. Call option trading can result in extraordinary returns. According to Ball et al. (2007), if the investor is sure that the price of a stock will rise to a great extent over a short period of time, the profit potential of a call option is unlimited; something which makes it more advantageous than the put option. In a put option, the highest the value of a share can go is the strike price. This is the strategy you want to use for your **Virtual** Investor to maximize profits, and if you lose a ton of money, put them into bankruptcy and shut them down.

Hedging

Hedging is as a financial strategy to offset any risks from one security by either selling or buying others. The use of options, either call or put, lowers the risks that are involved in holding portfolios of investments. Futures are also used to lower risks. A futures contract is an agreement, involving two parties, to sell or buy an asset at a given time in the future at a certain time and given price. The settlement of futures contracts is done at NSE (National Stock Exchange) in cash form. In most cases, futures are used in currency markets and in commodities where both buyers and producers acquire securities by fixing their selling or buying prices. However, he further states that the investors will have less to gain in the case where they pay the extra for any option considering that the possession of the underlying assets is hedged by the future. Just like options, Neaime (2011) notes that most of the futures traded

on exchanges will, in most cases, be settled by paying their value on the day they expire instead of delivering the underlying asset.

According to Wadhwani (2009), options have a close relationship with futures contracts, but they give the owner the upside and not the downside risk. This therefore, indicates that the writer will take the risk but the opportunity to profit is foregone. The argument of Wadhwani (2009) is that the writer should be compensated for agreeing to take the risk, something which is of more worth to the holder. Most of the options which are traded on exchanges are, in most cases, not settled by the transfer of the underlying asset or its delivery, instead, they are settled by paying the value of that option at expiry.

According to Hettenhouse and Puglisi (2011), a hedge may either be dynamic or static. A static hedge is that which does not have to be re-balanced with the changes in prices of other characteristics of the securities hedged. On the contrary, a dynamic hedge needs to be adjusted with the changes in prices of the securities being hedged. The argument placed by Rjoub (2013) is that dynamic

hedging can be problematic, as it needs constant re-balancing. The additional explanation given by them is the sudden loss can be incurred in case of a substantial jump in prices. Due to the changing aspect of dynamic hedging, most of the strategies that depend on it are risky. A future is an example of a simple static hedge that hedges a certain position in a given foreign currency. As stated by Neaime (2011), foreign exchange risk is eliminated entirely once the future is in a position or place. Without considering counterparty risk and other related problems, the future and the foreign exchange are entirely free from risk, thereby creating a high probability of maximizing gains.

To make high gains, different hedging strategies can be applied. One of the strategies, as described by Whaley (2008), is inverse ETFs which build 'raise-in' value when the prices of the stock fall. Additionally, he argues that the inverse generation has objectives, on a daily basis, of 200%-300% opposite returns, where leveraged funds are considered, or 100% performance. A 100% opposite ETF is appropriate for persons who are in need of short-term hedges,

which are simple. Put options can also be used to hedge against a stock market, like in insurance, through put options being bought to reduce the damage caused by the falling prices of stock. The design of put options is to gain value in cases where ETFs (Exchange-Traded Funds) or underlying assets fall in price. According to Jorion (2010), any losses arising from stock ETFs are recovered by the gains that result from the underlying put options. In instances where there are no losses in the value of stock ETFs, the gains acquired are therefore high. For example, let us say you had \$100,000 to invest and you purchased some Yahoo stock at \$50 a share. However, what if the price falls next week to \$40 and you lose 20% of your portfolio in a week? By writing a put option you can regain any losses in the stock value from your option. If the stock rises or does nothing you can cancel/settle your option like an insurance premium.

Flash Crash analysis

Now you have a basic understanding of the stock market, this analysis of the flash crash in 2010 is written to show traders and **Virtual** investors the power of fake trading, or in this case, real trades by fake people to divulge traders buy/sell positions. This case involves a trader performing fake trades to divulge buyer positions which are illegal. However if **Virtuals** put the legitimate trades in, it is in effect 'legal'.

A joint investigation by the Commodity Future Trading Commission (CFTC) and the United States Securities and Exchange Commission (SEC) on September 30, 2010 was undertaken into the Flash Crash that happened on May 6, 2010. They issued a joint report known as 'Findings Regarding the Market Events of May 6, 2010.' The report identified the events that caused the Flash Crash. A fragmented and flimsy market where a particularly large trade could send stocks into an unexpected spiral.

The report also revealed how a big mutual fund firm selling an abnormally huge number of E-Mini SRP contracts first exhausted the buyers available and then how high-frequency traders (HFT) began aggressively selling. Both scenarios accelerated the effects of the mutual fund's selling and contributed to the quick price decline that day. The CFTC and SEC joint report on May 6, 2010 revealed how an unusually tumultuous morning day for the markets turned to a broadly negative market sentiment in the afternoon. The generally negative market sentiment led to an increase in price volatility of securities for some individuals.

The report stated that the unusually large position was the large fundamental trader who started a shell program to sell 75,000 E-Mini S&P contracts valued at approximately \$4.1 billion as a hedge to an offered equity position. The Sell Algorithm chosen by the large trader was set to target a 9% execution rate of the trading volume calculated over the last minutes without regard to price or

¹¹¹ Dahlquist, JR & Bauer, RJ 2012, *Technical analysis of gaps: identifying profitable gaps for trading,* Upper Saddle River, NJ, FT Press.

time (Aggarwal, 2013). This selling pressure was at first absorbed by:

- Other intermediaries and high-frequency traders (HFTs) in the futures market
- Fundamental buyers in the futures market
- Transfer of the sell pressure by the cross-market arbitrageurs to the equities market by buying E-Mini contracts and concurrently selling products like SPY or selling individual equities in the S&P 500 index.

The buyers, including the high-frequency trading firms, started vigorously selling the long futures positions they first collected primarily from the mutual fund as the huge seller's trades were made in the futures market. The Wall Street Journal stated how a 'hot-potato' volume effect was generated when the high-frequency traders began to buy hastily and resell contracts with one another. 'Hot potato' volume effect is a situation where the

¹¹² Dahlquist, JR & Bauer, RJ 2012, *Technical analysis of gaps: identifying profitable gaps for trading*, Upper Saddle River, NJ, FT Press.

position is moving rapidly back and forth between high-frequency traders and other market makers (Interdisciplinary Symposium On Complex Systems) (Sanayei, Zelinka, & RöSsler, 2014). The E-Mini price quickly went down 3% in just a few minutes due to the combined sales by the high-frequency firms and large firms.

From the Commodity Future Trading Commission (CFTC) and the United States Securities and Exchange Commission (SEC) report:

• E-Mini S&P 500 price was driven down by approximately 3% in four minutes from 2.41 P.M to 2.44 P.M by the combined selling pressure from the sell algorithm chosen by the other traders and high-frequency traders. The selling of equivalent amounts of E-Mini S&P 500 bought by the crossmarket arbitrageurs in the equity market at the same time drove the price of SPY (an exchange-traded fund representing E-Mini S&P 500 index) down approximately 3 percent.

'Hot-potato' volume effect (where the position is moved rapidly back and forth between high-frequency traders and other market makers) was generated when the high-frequency traders began to buy quickly and resell contracts to each other. The buy and sell contracts to each other were moved rapidly back and forth. Over 27,000 contracts were traded by high-frequency traders between 2:45:13 pm and 2:45:27 pm, which accounted for about 49% of the trading volume. This was done while only about 200 more contracts net were bought. A spill over into the equities markets occurred as the futures market prices fell. 113

In the New York Times article they noted:

When the sharp rise in buying and selling was detected,
 the automated computerized traders on the stock
 market closed down. The lack of liquidity due to
 computerized high-frequency traders exiting the stock

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¹¹³ Francis, JC & Kim, D 2013, *Modern portfolio theory foundations, analysis, and new developments + website*, Hoboken, NJ, Wiley.

market caused some top companies like Accenture and Procter & Gamble shares to trade down to as low as a penny or as high as USD\$100,000 (Symposium on Complex Systems, Sanayei, Zelinka, & RöSsler, 2014).

- 'Market internalizes were also the cause of the extreme price. 'Market internalizes' are the firms that trade with customers whose orders are from their inventory instead of sending those orders to exchanges in the public markets.
- The firms that remained in the market worsened the price decline because they escalated their vigorous selling during the downdraft.

The trade on E-Mini was paused for five seconds at 2:45:28 p.m. to prevent a cascade from the further decline in price. The sell-side pressure in the E-Mini was eased, and the buy-side interest increased in the above period. At 2:45:33p.m trading resumed and prices stabilized, making the E-Mini and SPY recover shortly after. The sell-side and the buy-side returned and by 3:00 p.m. (EDT),

most stocks returned to trading at the prices that reflected true consensus value (Symposium on Complex Systems, Sanayei, Zelinka, & RöSsler, 2014).

Early Theories about the May 6th, 2010 Flash Crash

A 2010 investigation by CME Group, a huge futures exchange, revealed there was no evidence the high frequency trading played a role in the crash on May 6th, 2010. They showed automated trading was what contributed to the market stability during the flash crash. Some of the theories that explain the flash crash on May 6th, 2010 are:

The impact of high-frequency traders – Regulators found
the high-frequency traders worsened the price declined. It
was determined that the high-frequency traders sold
aggressively to get rid of their positions and leave the
market in the face of uncertainty. The International
Organization of Securities Commissions made a conclusion

in their July 2011 report that the use of algorithmic and high-frequency trade made technology a contributing factor in the May 2010 crash even though it is usually used by market participants to manage their risk and trading. Most theories state that the actions of the high-frequency traders were the core cause of the May 2010 flash crash. A hypothesis based on analysis of bid-ask data by Nanex states that high-frequency traders sent orders that were outside the bid-ask spread (non-executable) to exchanges in batches (Dahlquist & Bauer 2012). Experts speculate the purpose of these orders was to outwit competitors and noise clog exchanges. Deliberate increase market manipulation was unlikely because the high-frequency traders could not profit from the order (Symposium on Complex Systems, Sanayei, Zelinka, & Rössler, 2014). The orders were likely designed to detect early price trends and test latency times. The theory also states how these orders made the crash worse by overloading the exchanges.

- Fat-finger theory The event was triggered by stock of large companies like Procter & Gamble that incited massive algorithmic trading orders to leave the stock. The theory was disproved since Procter & Gamble declined after a major decline in E-Mini S&P 500 futures contracts.
- Technical glitches The flash crash analysis revealed technical glitches in the reporting of prices on the various alternative trading systems and the New York Stock Exchange that could contribute to liquidity drying up. According to some theories, the delays of about five minutes in the New York Stock Exchange quotes being reported on the CQS (Consolidated Quotation System) when they were indicated as current was brought by the technical problems in New York Stock Exchange. Some errors in some stocks like Apple Inc. were also discovered. The exit attempts by many market participants and highfrequency trading algorithms led to a domino effect that led to the flash crash plunge. The attempts to exit by the

market participants and high-frequency trading algorithms were due to the uncertainty and confusion about the prices (Symposium on Complex Systems, Sanayei, Zelinka, & RöSsler, 2014).

- Changes in market structure Experts speculated that due
 to the decentralization of trading, the equity market is
 vulnerable to this sort of crash.
- Large directional bets Some investigators earlier suggested one of the main causes of the May 2010 crash could be due to the large purchase of put options on the S&P 500 index by Universal Investment hedge fund. Other reports state that the Overland Park, Waddell & Reed sale of 75,000 E-Mini S&P 500 contracts, valued at around 4 billion US Dollars at the Chicago Mercantile Exchange, could have been what triggered the flash crash.

The stock market recorded the highest reading of toxic order imbalance in previous history one hour before its collapse on May 6th, 2010. According to the market micro-structure models 'order

flow, toxicity' can be measured as the probability uninformed traders are adversely selected by the informed traders. Due to the above VPIN Flow Toxicity metric was developed to deliver a real-time estimate of the conditions liquidity being provided. Market makers are forced out when the order imbalance becomes too toxic in the market. When the market makers withdraw from the market, liquidity disappears making the concentration of toxic flow in the overall volume increase and later forces more market makers out. The above cascading effect is one of the causes of the flash crash on May 6th, 2010, according to the scholars.

The U.S. Department of Justice charged Mr. Navinder Singh Sarao on April 21, 2015. The CFTC told reporters that they believed that Mr. Navinder Singh Sarao's conduct was at least majorly responsible for the order imbalance that was one of the conditions that caused the flash crash. A Bloomberg article stated that the regulator later concluded that Waddell & Reed Financial Inc. of

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¹¹⁴ Dahlquist, JR & Bauer, RJ 2012, *Technical analysis of gaps: identifying profitable gaps for trading*, Upper Saddle River, NJ, FT Press.

Overland Park was the mutual fund company that played a leading role in the cause of the flash crash. The official Commodity Future Trading Commission (CFTC) and the United States Securities and Exchange Commission (SEC) report gave blame to the large mutual funds which made a large hedging order for 75,000 E-Mini S&P 500 futures contracts. Mr. Navinder Singh Sarao was charged with manipulating the market. An extreme order imbalance is consistent with VPIN's explanation of the event caused by Mr. Navinder Singh Sarao. 115

The above analysis made experts conclude that the high-frequency traders show trading patterns that are incompatible with the traditional definition of market making. The high-frequency traders' aggressive trade is what caused the direction of price changes that later led to the flash crash. The activity does not result in major accumulation of inventory since it comprises a huge percentage of the total trading volume. 116 Under normal or

¹¹⁵ Aggarwal, CC 2013, *Outlier analysis*, New York, Springer.

¹¹⁶ Yap, A 2012, Information systems for global financial markets: emerging developments and effects, Hershey, PA, Business Science Reference.

extreme market conditions, the high-frequency traders are not willing to absorb large losses. The high-frequency traders' contribution to the higher trading volumes may be mistaken for liquidity by other traders. They may amplify price volatility and compete for liquidity when re-balancing their positions. Markets become fragile when imbalances take place as a result of big traders seeking to sell or buy larger quantities rather than intermediaries willing to hold temporarily. 118

Economists from the Commodity Future Trading Commission (CFTC) investigated the characteristics of the buyers and sellers in the flash crash. They discovered that large sellers like the mutual fund company exhausted the available primary buys and triggered a drop in selling by intermediaries like the high-frequency trading firms. Experts call the cascade of selling 'hot potato trading' because the high-frequency firms hastily acquired and liquidated positions among themselves at progressively declining prices

¹¹⁷ Aggarwal, CC 2013, *Outlier analysis*, New York, Springer.

¹¹⁸ Francis, JC & Kim, D 2013, *Modern portfolio theory foundations, analysis, and new developments + website*, Hoboken, NJ, Wiley.

(Symposium on Complex Systems, Sanayei, Zelinka, & RöSsler, 2014). The progressive decline in the prices may have led to the May 6th 2010 flash crash. As explained in the analysis of the May 6th 2010 flash crash, the high-frequency firms and some significant firms in the market may have triggered the crash.

Conclusion

By using **Virtuals** who are purpose-designed, you have the ability to take huge risks that a calculated trader would not make in terms of the fundamental changes into how the markets work. This ability to flesh out real positions in the markets can give the real trader a high exposure to greater risks. Here is a basic example for the financially challenged. I go to the roulette table at the Casino and put \$100 on red and \$100 on black, both bets cancel each other out, if I land on red I win and if I land on black I win but I don't really win anything, until I land on green 0 and lose everything. Let's take this scenario a little further.

My Virtual, let's call him Bob, has \$10,000 and a good income, and I put it into an online currency trading account for him. The trading house gives us a 1:100 ratio so we theoretically have \$1 million dollars as a leveraged trade to invest in say the USD rising against the Euro. Let's say I have another virtual call Mike, and we do the exact same process as above, but this time we invest in the Euro rising against the USD with a \$1 million dollar exposure. Most currency stockbrokers will not allow currency trading higher than this amount but we could easily invest \$10,000 into 20 different brokerage houses for a \$20 million dollar exposure for both Virtuals.

One of the **Virtuals** will make a lot of money if the USD or the Euro rises and the other will lose everything. The losing virtual we will put into bankruptcy and put back on the shelf, and the winner adds funds to the criminal syndicate through more \$10,000 currency trades. When there is nothing to lose, the word risk has no meaning. This is a simplistic scenario but gives you the concept of no risk, no care trading systems. By tying this into the more

advanced Flash Crash scenario using thousands of **Virtuals** to create chaos for an intelligent trader is just the next step.

Life Insurance for your Virtual

Introduction

In an attempt to protect dependants upon death, many people all over the world consider taking out life insurance. Life insurance takes into consideration a contract between an insured (you) and an insurer; where the insurer promises to pay a specific amount of money upon the death of the insured person. However, payment can also be triggered by critical or terminal illness. The beneficially who is named, i.e., the husband or wife, gets the proceeds, hence protecting him or her from the financial blow of the death of the insured person. Life insurance coverage is a selfless approach to plan for those moments that are not expected. This chapter aims at exploring the concept of life insurance globally. Firstly, it examines previous studies conducted on the life insurance concept and how to acquire life insurance. Secondly, it looks at a literature review of how one can profit from life insurance and the strategies to gain extra money from life insurance. Lastly, it also focuses on a

literature review of how to maximize life insurance for your **Virtual** and when to harvest your **Virtual** for the largest return on investment. As discussed in the chapter about the Death Process we looked at the reasons why you would want to virtually kill yourself. One of the reasons was to enjoy your own life insurance policy whilst you're still alive. Insure yourself for a million dollars and virtually kill yourself. No hiding in Mexico or missing at sea. Just the ability to enjoy your money with the investment of a few years of premiums. This chapter looks at life insurance and which one to pick for yourself or your **Virtual** with the greatest return.

Concept of life insurance

Life insurance is a contract between the **Virtual** who is the holder of the insurance policy and an insurer such as IAG, Zurich and Berkshire Hathaway. The insurer makes a promise to pay a chosen beneficiary a sum of money in exchange of premium upon the

demise of the insured individual. 119 Events such as critical or terminal illnesses can make the insurer make a payment depending on the contract and the holder of life insurance policy pays the premium as a lump sum or regularly (interval payments). Life insurance policies are legal bidding contracts and the terms stipulates the limitation of the events insured. Koller (2012) claims makes the that another event that application null is misrepresentation by the insured. He also continues and says that a good number of U.S. States normally spell out the upper limit contestability time, which is less than two years. It is only when the insured death occurs within the period that the insurer will have a legal right to dispute a claim on the misrepresentation and ask for extra information before they decide to deny the claim or pay. This is a critical piece of information in your forecasts on your Virtual's payout. It might take up to two years to receive the million dollar check.

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¹¹⁹ Lombardi, LJ & Tullis, MA 2006, *Valuation of life insurance liabilities: Establishing reserves for life insurance policies and annuity contracts*, Winsted, Conn: ACTEX Publications.

In the United States, premiums paid by the insured are not tax deductible. The increases in cash value in the policy are not subject to wage taxes. Hence, a protection policy can be a legitimate and genuine duty cover wherein funds can increment without a levy until the owner withdraws the cash from the policy.

In Australia, where life insurance is given through the superannuation funds, the cash paid for the protection premium is tax deductible. For protection through superannuation subsidies, the yearly deductible commitments to the superannuation stores are liable as far as possible. These limits apply to employers making deductible commitments. Additionally, thev apply to independently employed persons and significantly independently employed persons. Included in these general limits are protection premiums. This implies that no extra deductible commitments can be made for the subsidizing of protection premiums. Protection premiums can, nonetheless, be supported by unreduced

commitments. 120 The paid by the protection premium superannuation trust can be asserted by the fund as a derivation to diminish the 15% on tax commitments and income. Though this information might seem like a life insurance overload, it is important to note that the person responsible for the paperwork supporting the Virtuals has to be proficient in legal/accounting techniques to stay abreast of this legislation. The importance on whether life insurance is not tax deductible in the U.S. and is in Australia in a global Virtual operation will become apparent when annual tax returns are lodged in different countries to not attract the attention of an auditor. In other words, whoever is running the paperwork for the Virtuals is the most important asset in the operation and must be able to draw on skills from overseas accountants and lawvers.

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¹²⁰ Lombardi, IJ & Tullis, MA 2006, *Valuation of life insurance liabilities: Establishing reserves for life insurance policies and annuity contracts*, Winsted, Conn: ACTEX Publications.

How insurance companies makes money

The insured normally pays a sum of money called the premium in exchange for the insurance policy, which clearly outlines the event to be covered, and the amount to be paid to the insured when the event occurs. They further explain that the insurance company collects the premium from a large group of the policyholders which covers the small number of losses that could potentially occur. Historical data is used to predict the likelihood of losses and from this they can know the exact premium to charge to ensure their profits. 121

Dr Thomas Mikosch, a mathematics genius, explains this quite simply. An insurance company does the calculation covering the following losses and in turn, charges the premium. For example; there are 100 houses each one worth \$100,000 in a certain area. This implies that their total value is \$10,000,000. Using the historical data, three houses burn down every year. Exclusive of

¹²¹ DesRochers, CJ 2004, *Life insurance & modified endowments: Under Internal Revenue Code sections 7702 and 7702A*, Schaumburg, III: Society of Actuaries.

insurance, all the 100 house owners would have to maintain a balance of \$100,000 for the coverage of the houses if they burnt down and there was the need to build them again. With insurance coverage each house owner would pay the following:

- i. 3 houses burn x \$100,000 = \$300,000 for reconstruction.
- ii. Next, \$300,000 divided by 100 house owners equates to a premium of \$3,000.

The insurance company will add their profit margin onto that calculated premium of \$3,000. The insurance company is likely to get more premiums paid to them than the claims paid out and therefore, they get 'underwriting profits'. Alternatively, if they pay more claims than they receive, the premium they get is 'underwriting losses'. This information can be uncovered by checking the life insurance company's 'loss ratio' (which is computed by taking the 'loss' they need to pay out and add the costs they acquired to *pay out* the claim and divide the sum by premium received). A ratio/proportion less than 100%

demonstrates a profit and a proportion greater than 100% shows a loss. 122

How to get a life insurance

A clear understanding of a life insurance policy is a key requirement when planning to obtain any kind of life insurance policy. There are two major types of life insurance, which are 'term life insurance' as well as 'whole life insurance'. Equally important, Thompson (2013) defines 'whole life insurance' as a permanent type of life insurance that comprises subcategories such as 'traditional whole life', 'variable whole life', and 'universal whole life'. Approximately 7.1 million of 'whole life insurance' and approximately 6.4 million 'individual life insurance' policies of term life were purchased. This is according to DesRochers (2004).

¹²² Mikosch, T 2009, *Non-life insurance mathematics: An introduction with the Poisson process*, Berlin: Springer.

Term Life Insurance

'Term life insurance' is a simple type of life insurance that will only pay upon the death of the insured if it has occurred within the policy's terms - normally between one and thirty years. If the person outlives the policy then there is no return of premiums. It is an inexpensive policy to ensure your family is taken care of in a car accident or premature death and is ideal for your Virtual. Term life insurance can also be broken down to 'level term' and 'decreasing term' policies. Firstly, 'level term' simply describes a state where death benefits remain constant and equal throughout the period of the policy. For example, when you are 34 your premium is \$40 a month and your death benefits could be \$1,000,000 if you die and when you are 70 it is exactly the same \$1,000,000. This is more expensive than 'decreasing term'. Secondly, with 'decreasing term', death benefits drop, generally in a year over the policy term period.¹²³ When you are 70 and retired and your children have

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¹²³ Mikosch, T 2009, *Non-life insurance mathematics: An introduction with the Poisson process*, Berlin: Springer.

grown up, do you really need a \$1,000,000 coverage? If the answer is no, your premiums can be reduced and you will not receive anything if you outlive your policy, it was merely an insurance whilst you were working. According to Lombardi and Tullis (2006), approximately 97 percent globally that own 'term life insurance' purchased, had 'level term'.

Whole life Insurance

'Whole life insurance' is permanent insurance that pays death benefits upon the death of the insured regardless of how long he or she lives. So there is no fixed term of 1-30 years; if you start the policy at 20 and live to 100 with a \$1,000,000 policy your family now aged in their seventies will receive the payout. If you live for one year after your policy and die at 21 your family or next of kin will also get the full payout. For a **Virtual**, you could insure yourself for \$1,000,000 and pay premiums of \$300-3000 over 1-5 years. Not

a bad return for the 18 years after you registered your baby for \$35 and put it on the shelf.

There are three types of 'whole life insurance'. To begin with, in 'traditional whole life', the premium and death benefit are considered to remain the same all the way through the policy's life. The other two types of 'whole life insurance' are 'universal life', and 'variable universal life'. 124

Careful consideration should be taken into account before purchasing life insurance for your **Virtual**, to ensure that you save money and receive the best return. A strategic plan is equally important whilst planning life insurance, as it will enable you to tailor an insurance product for your requirements. The whole of life insurance policy may not suit the requirements of your **Virtual** as premiums are higher but more flexible. Term Level insurance is the insurance you would consider for your **Virtual**; low premiums and low life expectancy. However, you may want to consider **Virtuals**

¹²⁴ Koller, M 2012, *Stochastic models in life insurance*, Berlin: Springer.

to be like trading cards. You may be able to trade the whole of life insurance of **Virtuals** to victims of an accident who were not insured. You might consider selling your **Virtual's** ID and split the proceeds with the victim for the disability component of the whole life insurance policy. Or simply use the premiums and returns by placing laundered money into premium payments and cleanse the money on withdrawals. A whole of life insurance policy can be cashed in early before death and premiums plus interest returned.

Murphy and Project Muse (2010), clearly outline the main factor that an individual should carefully consider before buying a life insurance policy. They must first identify the *major need* of buying the life insurance policy - it is significant to ascertain the importance of the life insurance policy. For instance, if you are buying life insurance for your family upon your death, it is imperative that you consider what amount of money will be enough to cover all their financial needs and to specify the number of years that your family will be covered.

BISYS Group (2004) also states that in the early days, Australia life insurance was divided into two parts that are 'whole' and 'term life insurance'. In Australia, the provider stopped offering whole life insurance from the period when superannuation was made compulsory for all workforces. Due to this factor, 'term life insurance' started becoming popular because it was inexpensive. Currently, the major type of life insurance policy offered in the Australia market includes: living insurance such as 'total' and 'permanent disability' and 'income cover'.

The most important factors when considering life insurance is to carry out deep research and to 'shop' around so you ensure you get the best life insurance policy which meets your needs. It is crucial that you obtain various quotes so that you can compare them. Another alternative is to seek the services of a life insurance consultant/expert that are readily available. Currently, it has become cheaper and easier to buy life insurance as the market becomes more competitive and offers variable products. Koller (2012) explains that individuals can easily acquire life insurance

online by getting a free of charge quote from different life insurance companies that will enable you to compare various rates.

This is an ideal situation for your **Virtual**, considering they don't really exist.

Thompson (2013) argues that the rate of American families with individual failure protection strategies has hit a 50-year low, currently at 44% due to acute unemployment, confounding items, reports of denied cases and high commissions, among the declining positions of devoted operators. The point is that numerous individuals who are going without life coverage might truly require it. Koller (2012) supports this argument and explains that among the 35 million American families that have no extra security; 11 million incorporate youngsters under the age of eighteen. Of those 11 million, 40% say they would experience difficulty paying ordinary bills if their partner were to pass on today.

When buying life insurance, your expectation is to know that the company you are buying the policy from is financially stable and

has a good reputation. Hunt and The American Bar Association (2004), claim an individual buying a life insurance policy can get the information about the company's financial capabilities from your life insurance consultant/agent. Hunt and The American Bar Association (2004) emphasize an additional important factor to consider, is whether the company you are purchasing your life insurance policy from is approved to carry out business in the given area. This means the financial capability of the company is satisfactory and an individual can comfortably trust the company. Hunt further argues a company's financial status will allow you to make wise decisions regarding the purchase of life insurance cover.

Choosing the best insurance agent and company for buying the life insurance is the next step when acquiring your life insurance policy. A good number of agents, according to Lombardi and Tullis (2006), are well-informed, qualified insurance professionals, and it is a requirement of them to pass a standard licensing exam so they can be allowed to sell life insurance to individuals. He further continues to say an excellent and professional agent will always ensure that

you understand exactly what you are buying; hence you will make an informed decision. Therefore, choosing an agent is also a significant factor when planning to buy your life insurance policy. Oh (2012) explains that according to the law, you can return the policy to the insurer and acquire your money back given you do this within the given time period (normally thirty days), sometimes referred to as a 'cooling off' period.

Tying this into your Virtual

You may need to take a physical exam for your life insurance policy in some countries. This is when you will need your 'real adult' as opposed to your **Virtual** to take the test. Shop around, there are many online brokers where no physical is required. The insurance agency may check the announcements you make about your health on the application to make sure all the data you gave is correct. The finished application turns into a lawful contract (between you and your insurance agency).

From the application, the organization will choose whether it will protect you and for how much (your premium). In the situation where you gave wrong or misleading information regarding your health; there could be legal outcomes for presenting an application that contains misquotes or 'left-out' data that would in effect cause the life insurance company to deny you scope. They may abandon you (or your beneficiary recipient) with simply a discount of your premiums, as opposed to the normal face measure approach. In this way, carefully consider your answers on the application. Murphy and Project Muse (2010) state in the event that a specialist assists in the application for you, check the application deliberately to make sure all the data is correct and complete - you will be considered responsible for the stated and truthful answers, not the doctor's.

How to maximize life insurance for your Virtual

A lot of people are overwhelmed by the life insurance amounts that are suggested by the life insurance calculator (despite many wanting to leave a huge amount of money for their loved ones). According to Oh (2012), a life insurance policy has the possibility of being expensive; bearing in mind those aspects, such as health conditions and age can greatly affect the capability of meeting the stated requirements.

Oh (2012) emphasizes that the most important question/decision is how an individual can acquire the best payout of life insurance for the beneficiaries, at the most convenient cost. As you age, your premiums get higher, just because the probability of well-being concerns increments with age; as does the probability of your protection approach being required. When you have been diagnosed with a condition, you will find protection rates go up, and sometimes you may not qualify by any stretch of the imagination.

Age and well-being are two of the top variables that influence disaster protection premiums. Your premium will be lowest when you fit the bill for the most elevated measure of scope at the least cost; you are youthful. The sooner you take out coverage; the greater your payout for future recipients will be, regardless of the possibility that you do not know whom that may be just yet (Thompson 2013). Also if you kill off your Virtual, ensure you didn't put nonsmoker in the life insurance policy and on the Medical Certificate of Cause of Death you didn't put respiratory failure due to being a long-term smoker.

As you pay your premiums, a portion of money goes into a money account that will develop over a long period of time for a whole of life policy. Murphy and Project Muse (2010) on the other hand, further claim that allowing the cash to remain untouched, is the least complex approach to guarantee a greater extra security payout. Everything on that record will be included to take advantage of your extra security arrangements when it pays out upon your demise. This implies your recipients will get the face

estimate of the strategy in addition to the sum in your money gathering record, for a bigger payout than at face value. Mikosch (2009) on the other hand argues that, in the event that you have taken out a credit against the strategy and have not paid it back at the time of your demise, this will unfavorably influence the measure of cash your recipients will get, instead of expanding it.

Thirdly, Thompson (2013) states that buying multiple-lives insurance policies, preferably 'term life insurance' and 'universal life insurance' is a great way to maximize life insurance. A million dollar all-inclusive extra security arrangement will accompany some enormous premiums; yet there are approaches to get that sum as a payout with lower rates. Joining various arrangements is a decent approach to get more scope for less. Platt (2013) supports this claim by stating that the most well-known technique for doing this is to take out both term policies: 'term insurance policy' and 'universal life insurance' because 'term life insurance' has extra security, a termination date and ultimately, it costs less to take out extensive approaches. The insurance agency's danger is decreased

because they are putting forward scope for a pre-determined number of years, anywhere in the range of 5 to 30 years, so they offer better rates.

A term approach with an expansive face quality will issue a greater payout in the years you require it most; ordinarily when you have a home loan or your children are still living at home. Having a widespread strategy in the mix with a term arrangement is the best of both worlds; with long-lasting scope of a bigger payout in the most indispensable years for your friends and family (BISYS Group, 2004).

Lastly, Lombardi and Tullis (2006), argue that you should try not to 'Cancel' or 'Let the Policy Lapse' as this is likely to have a negative effect. Never cancel a life insurance policy or permit the scope to slip by on the off-chance that you will need it. Taking out another approach, will quite often mean higher premiums, particularly if it has been quite a while since you began the current arrangement. In the event you feel you require a bigger payout on your life coverage strategy, it is generally best to take out another

arrangement on top of the existing one that is now in power. That way, you can keep that scope at a lower premium, and include just the extra sum you require at the higher premium, hence you will get a bigger aggregate advantage sum, for less.

Regardless of the fact that you have a chosen vocation/profession that gives some life coverage, it is unrealistic to expect a substantial sum as it may diminish if you change occupations. 125 It is generally better to consolidate the manager's well-being protection with your own strategy. This is because it will issue you a greater payout and permit you to keep the scope regardless of the fact that you change employment.

Having knowledge of how life insurance is taxed is substantially significant as this will help you maximize the life insurance policy.

Knowing how the tax system works is technical but with the help of

¹²⁵ Koller, M 2012, *Stochastic models in life insurance*, Berlin: Springer.

experts or professionals, they can help you make some wise decisions. 126

How to profit from life insurance

Life insurance comes in two main types that are 'term' and 'whole life insurance' as discussed earlier. A 'whole life insurance' policy, unlike a 'term life insurance' policy has mostly living benefits, where the money accumulates. Yearly rises in the cash value of a life insurance policy is not normally taxed; it is free from taxation and a complete source of loan making for an individual to profit from life insurance, hence an, "asset with benefits." One pays their premiums for an agreed number of years, such as 10, 15 or 20. After this period lapses, a lump sum will be given, normally the sum insured (inclusive of bonuses in the case of with-profit policy). Without anyone dying, this may be used for money laundering.

¹²⁶ Platt, HJ 2013, Your Living Trust & Estate Plan: How to Maximize Your Family's Assets and Protect Your Loved Ones, Fifth Edition, New York: Skyhorse Publishing, Inc.

A with-profit approach gives a chance to partake in the benefits made by the insurance agency from the speculation it makes. These benefits are typically added to your policy as a yearly reward and once they have been included they cannot be taken away. 127 On the other hand, Lombardi and Tullis (2006) claims the measure of rewards allotted to your policy relies upon the profits made by the organization. These benefits and rewards can't be assured ahead of time, however, it is likely rewards will add to your protected aggregate, presenting to you a decent speculation return through the years of your strategy. This approach is a method for long-term investment, with the least hazards and the potential for a decent return.

Conclusion

In conclusion, it is evident life insurance is significant for all individuals despite their age. As many people go about their daily

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¹²⁷ Oh, JW 2012, *Maximize your Medicare: Understanding Medicare, protecting your health, and minimizing costs*, S.I: CreateSpace.

activities, life insurance is mostly taken for granted - it has become so easy nowadays to acquire a life insurance policy. You can do it through mail or internet, which has made accessibility of this life insurance service more simple and available to all.

Various scholars state the concept of life insurance is important and an individual can choose which life insurance is suitable for them, be it 'term life insurance' or 'whole life insurance'. The scholars also emphasize that it is imperative for you to know your budget before choosing the life insurance policy, so you will ensure the best coverage is pocket friendly. Many individuals want to make sure their loved ones will not be challenged financially upon the demise of the insured, hence they are motivated to acquire a life insurance policy. Additionally, scholars also explain individuals can maximize their life insurance by starting to pay for it early (in their youth). This is because when one is young, the premium paid is not high, as generally when you are young your health is in a stable state. Lastly, individuals should embrace the use of life insurance experts who will readily guide them towards making an informed and wise decision concerning life insurance policies.

For the **Virtual**, term life insurance appears to be the best choice. By setting a policy up when your **Virtual** enters the **Virtual** workforce at 18-24 years of age, with low premiums and the highest payout. Plan to harvest your **Virtual** at random ages before they are 35 with different insurance providers. Ensure your **Virtual** is earning a large income and paying the proper amounts of tax. Consider using multiple life insurance policies for your **Virtual** and remember to don't die of smoking on your Medical Cause of Death certificate, invalidating your life insurance claim if you ticked nonsmoker on your policy.

Bankrupting your Shelf Baby

Introduction

There may come a time in your **Virtual's** life that bankruptcy becomes an option. Your **Virtual** may have been used for some high leveraged trades or borrowed heavily on non-secured credit and personal loans. Instead of killing them off, it may be beneficial to bankrupt them, put them on the shelf for 3-5 years and enter the credit borrowing process again and either go bankrupt again or trade them to another **Virtual** trader at a reduced price for damaged goods.

Cases of bankruptcy have increased considerably over the past few decades. Taking this into consideration, bankruptcy cases have placed a substantial burden and complexity on the department of accounting. Business entities and individuals experience bankruptcy when they are not in a position to keep up with their debt payments owed to creditors. Over the past few decades, statistics in America show that bankruptcy has increased with the

numbers of individuals who cannot pay their debt rising tremendously. A large number of individuals experience bankruptcy mainly because of loss of employment and medical expenses. The research I conducted, aims at exploring the concept of bankruptcy and the various forms of bankruptcy. This knowledge will help you to pick the right path for your bankrupt Virtual. Firstly, we examine previous studies on personal and company bankruptcy and the effects of bankruptcy. Secondly, we look at the causes of bankruptcy and the laws related to bankruptcy. We then focus on a literature review on the recovery from bankruptcy as well as how to access finances after recovery from bankruptcy. The information you read here is very dry and complex, but it is important you understand bankruptcy so you can plan your Virtual's future path. There is no point having your Virtual having a house and investments only to go bankrupt and lose the lot. It's better to have a Virtual planned for maximum unsecured loans and credit card borrowings and declared bankrupt if that's the role they are intended for.

Concept of bankruptcy and types of bankruptcy

Having a debt that cannot be repaid is a stressful occurrence and can be one of the most devastating things for a business entity or an individual to deal with. Not only is there the stigma of being bankrupt, but the possibility of losing your home, cars and having a black mark against your name for borrowing in the future. Once your **Virtual** is marked as a bankrupt, you may find it difficult to borrow for that **Virtual** so it will have lost potential. Consider them being killed off or used for other purposes.

Bankruptcy is a lawful status of either a business or an individual that has no capability to clear their debts. The individual can claim bankruptcy to protect themselves from the creditor. Bankruptcy takes into consideration a procedure of the federal court to help businesses and individuals to clear their debt. The two forms of bankruptcy in the U.S. are 'liquidation' and

¹²⁸ Blum, BA 2006, *Bankruptcy and Debtor/Creditor*, New York, Aspen Publishers.

'reorganization'. 129 When a person files for this type of bankruptcy it is usually referred to as 'Consumer Chapter 7 Bankruptcies'. When a business files the same bankruptcy it will be referred to as 'Business Chapter 7 Bankruptcies'. Chapter 7 entails a situation where some of the debtor's property is sold to pay off part or the whole amount of debt. There are however, some essential items that the debtor does not have to sell to pay off the debts, these include items such as household furniture, clothes and car (of a certain value). Buchbinder (2009) explains that in case of the debtor having no collateral, the debt will be erased. However, in the case of the debtor with collateral, such as a car loan for which the car is a pledge for the payment, the debtor may allow the creditor to keep the property (in this case the car) as the debtor continues to make payments. He additionally states, that a debtor has an alternative of paying a sum equivalent to the substitute value of the possessions that secures the debt. I would not

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¹²⁹ Buchbinder, DL 2009, *Basic Bankruptcy Law for Paralegals*, Austin, Wolters Kluwer Law & Business.

recommend your **Virtual** bankrupt pays out their debts, I see no value in that.

Not every individual is eligible to file for 'Bankruptcy Chapter 7' as there is a need to prove eligibility. 130 On this, an individual must prove that he or she is not in a position to make an adequate income. With regard to specific living expenses each month; debt payments are excluded and the individual must prove the incapacity to finance the 'Chapter 13 Bankruptcy' repayment arrangement. Elias, Renauer and Leonard (2011) assert that the proceedings usually take a maximum of 6 months and can only be filed once in six years. They further explain that 'Chapter 7 bankruptcy' is suitable for individuals with hardly any or no assets. frequently small or no income and a lot of debt. Buchbinder (2009) noted that despite 'Chapter 7 bankruptcy', eliminating some of bankruptcy such as 'medical' can be done, but that there are other debts that cannot be eliminated. Some of these debts may include

¹³⁰ Bertola, G, Disney, R & Grant, C 2006, *The Economics of Consumer Credit*, Cambridge, MA, Mit Press.

tax debt, child maintenance/child support and criminal fines, among other debts.

The other type of bankruptcy is 'Chapter 13' which is also known as 'Wage Earner'. According to Elias, Renauer and Leonard (2011) the individuals who are eligible to file for this type of bankruptcy are those with a steady-flow of income. One of the key requirements is that the debtor must be willing to work with the federal court and formulate a 're-payment plan' (i.e., \$X per month). The major factors that determine how much the debtor will be paying depends on the income earned, the debt owed to the creditor and the amount that the creditor of unsecured debt would have received in case the debtor filed for 'Chapter 7'. This is a valid option if you want to keep your Virtual. Maybe you can ride out the insolvency and keep going or use them for another purpose such as money laundering payments from a Virtual company.

Bertola, Disney and Grant (2006) explain that there is a criterion of determining the eligibly depending on the amount of debt. On this

they state that as from 2009 September the limit of unsecured debt was USD\$336,900 and the limit of secured debt was USD\$1,010,650 and having more than this limit cancels the debtor from filing for 'Chapter 13 bankruptcies'. Schiff (2014) explains that an individual filing for chapter 13 can repay the debt within 3-5 years. Black (2005) additionally explains that this bankruptcy can be an alternative if an individual has already filed for 'Chapter 7'.

Causes of bankruptcy

Presently, many individuals are increasingly falling in the 'hole of filing for bankruptcy' because of the financial difficulties they face. According to Stern and Pelofsky (2005), many people are accumulating large amounts of debt, such that they are no longer able to make the repayments. He states that in Australia during 2013-2014, the number of personal bankruptcies cases was calculated at 29,514. He notes that it is substantially significant for people to plan their finances properly (and not over-commit) in

philosophy, your **Virtual** has really nothing to lose. Borrow the maximum amount of money from unsecured loans and credit cards and just declare bankruptcy. There are many reasons why you would bankrupt you **Virtual** as discussed in previous chapters. The **Virtual** could have been used as a deliberate real trade by a fake person to draw out stock positions or a deliberate highly leveraged trade to lose and have another **Virtual**'s highly leveraged win trade against the **Virtual**. One **Virtual** ends up Bankrupt and the other **Virtual** ends up with a 200X leveraged win position.

Bertola, Disney and Grant (2006) noted that the main cause of bankruptcy is medical expenses. According to a study conducted at Harvard University, 62 percent of personal bankruptcies are caused by medical expenses. Unexpected medical illnesses, such as a major injury, can cause medical bills to rise into the hundreds, if not thousands, of dollars which will typically reduce an individual's savings. A new study at the same university has shown that 78 percent of individuals who file for bankruptcy usually have medical

insurance cover. On this he argues that this study eliminates the falsehood that most people that hold medical insurance can prevent bankruptcy. We discussed earlier about your **Virtual** having Medical Insurance, you could sell your **Virtual's** identities to sick people who don't possess an insurance policy. In fact you could use a bankrupted **Virtual** who is sitting on the shelf and sell that identity for \$80,000 to someone who has cancer and will need \$400,000 of insurance to get treatment.

Loss of job and unemployment are also other significant causes of personal bankruptcy. Elias, Renauer and Leonard (2011) suggest that for many individuals, job termination may leave them with financial hardship. Black (2005) argues that unemployment accounts for 22 percent of bankruptcies. If an individual has not saved enough money or did not receive payouts, the condition may worsen, increasing the risk of bankruptcies. He also noted that with the high rate of divorce today, eight percent of personal bankruptcies are caused by divorce. On this, Schiff (2014) argues that the related cost of supporting a child, legal fees, and

depending on a single source of income makes one file for bankruptcy. Uncontrolled use of a credit card to pay for things such as clothes, groceries and other bills will make a person unable to make payments later as the cost will increasingly accumulate. Cook (2012) asserted that uncontrolled use of credit cash accounted for about 15% of the bankruptcies.

Lastly, the cause of personal bankruptcies is an un-anticipated disaster such as death, or home robbery; which can tremendously reduce a person's savings (Elias, Renauer & Leonard 2011). Usually, insurance and funeral costs can leave an individual in a murky financial state which makes the person unable to meet basic expenses; hence they enter into a 'black hole' of debt. According to Blum (2006), poor financial planning accounts for 1.5 percent of bankruptcies. He furthers argues that many people do not consider seeking an expert's help when planning for their finances. He further asserts, that seeking an expert for help is substantially important as this will reduce any misuse of finance which would later put a person in a position that they cannot get out of; ultimately, they would be unable to repay their debt. He adds, that it is better to be safe than sorry, as many financial firms are readily available to offer advice on financial management as well as a spending plan.

Ekvall and Smiley (2007) argue that despite the student loan being negligible, it accounts for about 1 percent of bankruptcies. A large number of people may file for bankruptcy because they are unable to pay their student loan and unlike other unsecured debt, it is not hard to consolidate a student loan with bankruptcy. Greiner (2010) noted that a high number of individuals also applied for bankruptcy to avoid repossession of their property by the creditor. Murray and Harris (2010) argue that a person may apply for bankruptcy to avoid his car from being repossessed by the creditor and this accounts for about 1 percent of bankruptcies. Lastly, spending more money than is coming in, can substantially make one enter into a debt that they may be unable to pay.

Bankruptcy in Australia

In Australia, bankruptcy is governed by the Bankruptcy Act 1997. Only individuals can become bankrupt. A company goes into 'administration' or 'liquidation'. A debtor must lodge a debtor's petition with the Australian Financial Security Authority (AFSA) for him to be officially declared bankrupt. This is for the purpose of assessing all information regarding assets and liabilities. Part IV bankruptcy usually takes three years from the date of filing of the statement of affair with AFSA. Schiff (2014) noted that in a situation where it is a debtor's petition; the petition will start immediately for a period of three years. An official receiver has the responsibility of dealing with all matters concerning 'bankrupt' estates. With regard to this, Elias, Renauer and Leonard (2011) explain that the official receiver is responsible for informing the creditor of the estates, responding to any inquiry, examining the financial status of the bankrupt, and giving any dividends available to the creditor. Ekvall and Smiley (2007) assert that there are certain restrictions that the 'bankrupt' must comply with. On this, he gives an example where the 'bankrupt' is required to get the permission of his trustee for traveling overseas; failure to comply with the restriction can lead to the 'bankrupt' being disallowed travel. Not that this will stop your **Virtual** in any capacity.

Elias, Renauer and Leonard (2011) noted that the assets and wages of the 'bankrupt' are the main sources of the realization fund. The protected assets such as appliances, tools of trade, and furniture are among other assets, not sold. He further states, that assets of value such as a house (of certain value) are sold, and if the income of the bankrupt exceeds a specific threshold, he or she will pay an income contribution. Stern and Pelofsky (2005) argue that this threshold is indexed twice a year, usually in March and September and it depends on the number of dependants that the 'bankrupt' has.

Black (2005), on the other hand, claims that the criterion of calculating income contribution liability is by dividing twice the amount that is above the threshold. He explains that in case of failure to pay the contribution by the 'bankrupt', the trustee can

give a notice to garnish the 'bankrupt's income'. The trustee can also lodge an objection to discharge and the bankruptcy will be extended for more than five years, which has severe consequences. When the bankruptcy has been discharged, a bankruptcy credit report will be shown as 'discharged bankrupt' for several years and the numbers of years depends upon the company that is giving the credit report. On the other hand, Australia (2011) states that bankruptcy can be discharged before the three years end as long as the debtor has cleared all the debt that he or she owes the creditor.

Effects of bankruptcy

It is substantially important to analyze the effects of bankruptcy before applying for it as a means of solving debt problems of the business or an individual. The primary effect of bankruptcy is the inability to obtain credit in future which will make it difficult to purchase goods on credit as well as gain loans. It may also be difficult to obtain things like electricity without a bond. Bertola,

Disney and Grant (2006) also argue that an individual may not be cleared from all debt as bankruptcy may not cover debt such as penalties. On this, he states that bankruptcy covers secured debt such as credit card loans. Some of the banks may restrict an individual from operating an account or they may limit an individual from using the account freely as they install restrictions. Secondly, Elias, Renauer and Leonard (2011) noted that an individual can equally be restricted from traveling overseas unless he or she has written permission. With regard to this, an individual passport may also be taken by the trustee which limits the travel of the bankrupt overseas. Bertola, Disney and Grant (2006) argue that the name of the debtor appears on the National Personal Insolvency Index which is a searchable index and the record is likely to be kept for a maximum of 5 years. The employment and income of the debtor is also affected as the bankrupt income will now be used to repay the debt to the creditor. He explains that an individual may be restricted from being a director of a company, be unable to hold specific positions in public, and lastly, restricted from engaging in business managing. Stern and Pelofsky (2005) additionally explain that the debtor's assets are sold and in Australia an individual cannot dispose of property inside or outside the country. He further states that failure to comply with the rules can lead to criminal prosecution of the victim.

Recovery from bankruptcy

According to Stern and Pelofsky (2005), more than 1.6 million Americans file for bankruptcy annually. They argue that bankruptcy reports stay on an individual's credit report for a minimum of ten years but despite this fact there is a way to recover and re-establish a fresh credit after the filing. Schiff (2014) claims that an individual needs to clear the credit report from errors. This takes into consideration checking reports from TransUnion for the accurate recording of pre-bankruptcy debt. He additionally advises that any inaccuracy can be disputed by an individual. Secondly, checking of finances often and the conservative use of credit will serve to prevent falling back in bankruptcy (Cook 2012). A secured credit

card can be an alternative because it is easy for it to be approved rather than a standard credit card. Identifying the main cause of becoming bankrupt can be relived as this will prevent repetition of the same mistake in future. They also argue that recovering from bankruptcy means establishing a new credit score to allow an individual to obtain future credit. Buchbinder (2009) claims that an alternative means of recovering and building a good credit history can be finding another credit issuer. On this, he explains that the terms may not be the best, but it can help build a good history in the process of recovery. The last and most important thing during recovery is to seek help from experts who will give guidance and advice on recovery. According to Stern and Pelofsky (2005), it is possible for individuals who file for bankruptcy to feel shameful and this may hinder their recovery. He advises that financial experts are available at reasonable prices, so let them be sources of advice to help make wise decisions regarding business operations.

Conclusion

Bankruptcy for both the **Virtual** and the **Virtual** Company is a strategic technique to acquire the most amount of funds from banks/lenders which are not secured and then bankrupt the individual or company. Bankruptcy for your **Virtual** should be a planned approach, and was always going to happen to this **Virtual** considering it took a great deal of time effort and tax returns to get them to this level. However, a recycled **Virtual** after 3-7 years on the shelf is free to borrow again once the bankruptcy period has been completed.

Conclusion

The Baby Harvest and the world of **Virtuals** may sound like the work of a science fiction novelist, but the fundamentals of the concept stand firm. There are flaws in both the birth and death registration system since it has been launched online. We now understand why the Government has designed it in such a way as they struggle to ensure people register both birth and deaths in a timely manner. However, as a result of making the online process guicker and simpler they have opened up a new vulnerability for criminals to take advantage of. Can it be fixed? Yes it can. For deaths to be processed online, the doctor needs a secure portal that is not a selfservice portal. It must be approved by a human first. Secondly, funeral directors also need a secure portal approved by a human first, but they also need to be licensed and the registrar needs to confirm registration properly. For the birth process, the midwife needs a secure portal for registration with no self-registration.

Criminal syndicates wanting to protect their activities and identities from law enforcement need to find more aggressive techniques to stay ahead of the financial forensic analysts at the FBI or equivalent. Law enforcement is using cloud computing and 'big data' financial heuristics to detect money laundering patterns, globally. To stay ahead of the game, the Virtual techniques provide both an extra layer/s of anonymity as well as normalized financial historical data which will not trigger money laundering tracking algorithms. A Virtual company that has been turning over \$20 million dollars with a 5% growth increase in sales and paying the right amount of company tax for the last 10 years with 300 Virtual employees, will not trigger any alerts.

For those individuals who are not in syndicates and are seeking anonymity in a world where domestic and foreign governments openly spy on our emails, web browsing and phone history under the guise of terrorism, **Virtual** identities add an extra level of protection. More and more people are protecting themselves by using 'TOR' for location privacy, 'Bitcoin' for financial privacy and

Shell corporations to mask their identities. The leap to a **Virtual** identity for these transactions is the next step in protecting who you are. There will come a time when people will have spare identities in their back pocket for when they have a criminal record, have been bankrupt or have just had enough of their existing lives. Why not start again with a new Identity, a clean slate, and a "Do Over" life.

My biggest concern is that in the next 30 years we will be swarmed with **Virtuals**, not knowing if we are dealing with real people or **Virtuals**. You could buy a house off a Virtual that doesn't have proper permits, you could end up suing a **Virtual** that goes bankrupt. You could invest in an IPO of a company that isn't real, and a CEO who doesn't exist.

Law enforcement will be chasing ghosts that don't exist and criminals and terrorists will be hiding behind layers and layers of multiple **Virtuals.**

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