The Actuarial Profession

making financial sense of the future

GIRO conference and exhibition 2010
Catherine BARTON, Partner – Ernst & Young Actuarial Services
Nicolas MALLISON, Director – Ernst & Young Fraud Investigations & Disputes

Fraud as an emerging risk

The impact of change in technology

12-15 October 2010

The Fraud Triangle

- I don't get paid enough
- The company owes me anyway
- Nobody is getting hurt
- Everyone else is doing it
- Nobody will find out





- I will just do this once
- I need to recoup some of the premium I paid
- It is less than 1p on every policy
- The company can afford it

- Financial gain: large or small
- Reputational gain
- Reduce pressure to perform
- Reduce job stress
- Malignant narcissism: Psychological gratification

FORCES ACT TOGETHER TO CREATE AN ENVIRONMENT FOR FRAUD



OPPORTUNITY

- Skills to execute the fraud
- Weaknesses to exploit
- Controls that can be overridden
- Partners in crime to help out
- Access to confidential business information



PRESSURE/INCENTIVE

Fraud Triangle in Insurance

Source	Rationalisation	Pressure/Incentive	Opportunity	Example Fraud
Employee /	"The company	Large debts	Working in	Pays false
Internal -	owes me a raise"		claims	claims in
Theft from			department	collusion with
company				accomplice;
				steals mass data
Soft -	"It's a large	Bit of easy extra	Belief genuine	Camera stolen
Opportunistic	company – it's not	cash	claims element	and additionally
low level	like we're robbing		can't be	decides to add
crimes	anyone"		distinguished	on ipod as want
			from fake	to get new
				model
Hard –	"Their claims	Large financial	Willing partners	"Crash for cash"
Organised	handling is weak	gains	in crime with	schemes.
crime	- they will never		skills to carry	
	find us out"		out scheme	

Emerging Risk Trends in Financial Services *Pace of Change*

Change facilitates crime by creating new opportunities

New technology

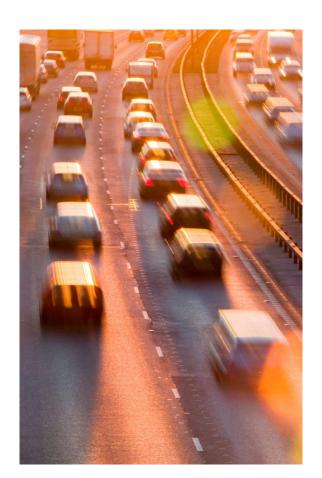
 Heavy targeting of newly launched systems resulting in restrictions that can defeat their purpose

Increase in bust outs / Model obsolescence

- The technology arms race means that institutions can often act quickly once they spot fraud.
- This has resulted in a increase in "bust out" type frauds and much shorter shelf life for detection scoring models

Introduction of new process / product

 Mass behavioural changes so that staff do not understand what is "normal" any more.



Emerging Risk Trends in Financial ServicesSpecialisation of criminal tasks

The internet has allowed criminals to specialise in particular elements of a crime

- Collection of customer ID information and credentials
- Production online phishing 'toolkits' for use by others
- Finding 'mules' accounts to allow criminals to extract money out of system

Potential increase in crimes being aided by insurance insiders who previously:

- might not have felt the risks justified the rewards
- or did not have the means to make use of information or data they could obtain

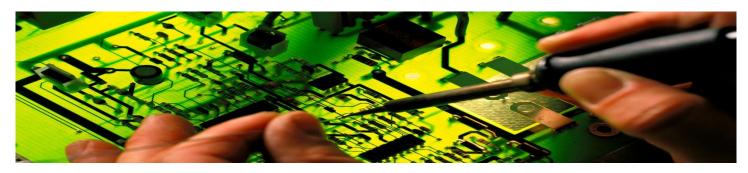


Emerging Risk Trends in Financial Services Mass data compromises

The electronic storage of information makes mass data compromises an increasing threat

Alteration of the economics of fraud

making it worth wide to set up boiler rooms and mine the acquired lists



Insurance case study

- Large number of broken car windscreen claims being fixed by a single firm.
- Investigation showed the firm was fake
- It had simply obtained a large number of policy details that were being exploited

Emerging Risk Trends in Financial Services Involvement of professionals 3rd party in fraud

There have be a large number of Mortgage fraud cases involving 3rd party professionals colluding

Insurance is also facing particular threats from dishonest 3rd party professionals

- Kickbacks
- Referral fees from brokers
- Embezzlement or theft by trick
- Licence application / misrepresentation
- Accident "management"

Cost verification techniques may be more effective in the long run



Emerging Risk Trends in Financial Services Targeting of the weakest institutions

The internet allows fraudsters to pass information and techniques between themselves including information about firms defences

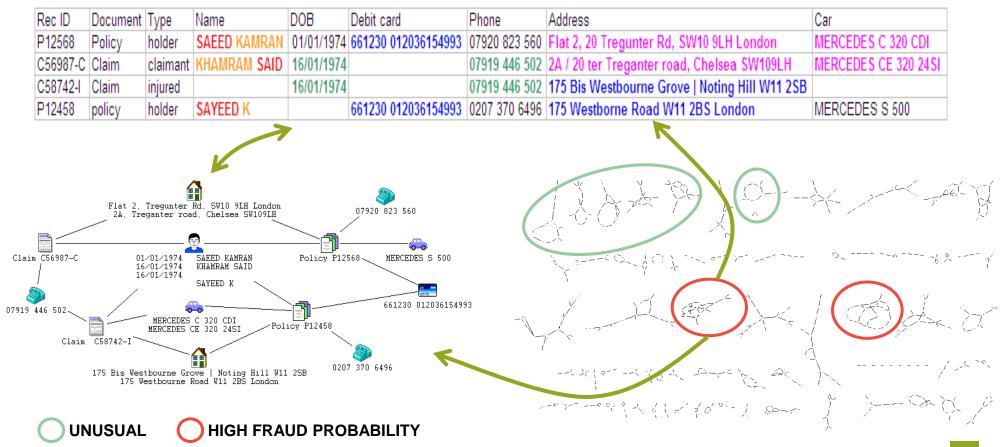
- Criminal target the top of the 'best buy' table shopping for the weakest link
- Heavier financial cost for being the worst in class that are becoming the 'go to' destination for particular types of fraud.

The threshold for minimum adequate level of anti-fraud capability is rising and moving more rapidly



Emerging trends in defences against fraud Mass Investigative Data Linking

Exciting new social network analysis techniques which can be used to help both prevention and detection...



Emerging trends in defences against fraud

More dynamic and connected anti fraud process



More layered approach

- Risk assessment of customer at the initial purchase stage
- · Building risk into pricing

Monitoring

- Tracking employee actions via network traffic sniffing
- Telematics
- Contemporaneous video evidence & Text mining
- Unmanned Aerial Vehicle (UAV)

Highly adaptive fraud scoring

- Changing fraud types / Moving targets
- Feedback and threshold effects
- Rapid predictive model obsolescence

Dynamic risk based handling taking into consideration investigation costs

New customer acquisition and claims lifecycle

Need to provide a deterrent / prosecute

- Criminals like to get away with it
- Need to consider ease of gathering evidence and prosecuting that vary by fraud type

Contact details

Catherine Barton

Partner European Actuarial Services

Direct: +44 207 951 5503 Mobile: +44 771 104 8102

cbarton@uk.ey.com

Nicolas Mallison

Director – Fraud Data Analytics Fraud Investigations & Disputes

Direct: +44 207 951 2750 Mobile: +44 792 082 3560

nmallison@uk.ey.com

