Assurances et gestion des risques Insurance and Risk Management



Global Best Practices in Insurance Claim Cycle Time & Leakage

Shishir Kumar

Volume 78, numéro 1-2, 2010

URI : https://id.erudit.org/iderudit/1106246ar DOI : https://doi.org/10.7202/1106246ar

Aller au sommaire du numéro

Éditeur(s)

Faculté des sciences de l'administration, Université Laval

ISSN

1705-7299 (imprimé) 2371-4913 (numérique)

Découvrir la revue

Citer ce document

érudit

Kumar, S. (2010). Global Best Practices in Insurance Claim Cycle Time & Leakage. Assurances et gestion des risques / Insurance and Risk Management, 78(1-2), 157–182. https://doi.org/10.7202/1106246ar

Résumé de l'article

Les réclamations frauduleuses en assurance génèrent des pertes financières énormes. Pour contrer ce fléau grandissant, les assureurs ont adopté des bonnes pratiques en matière de réclamations modifiant substantiellement leur manière d'opérer. Cependant, ils sont encore hésitants dans la mesure où leur investissement technologique doit reposer sur une gestion financière prudente.

Cet article recouvre les meilleures pratiques mises en oeuvre par divers assureurs durant la période entre 2003 et 2007. Il constate que la plupart des innovations technologiques en matière de réclamation ont été faites dans la branche d'assurance biens et responsabilités, et développées en grande majorité par les assureurs américains et britanniques. Globalement, la focalisation s'est faite, en matière de réclamations, sur le plan administratif et informatique. Le chef de file à cet égard est la compagnie Aviva qui a su adopter des technologies radicalement innovatrices.

Tous droits réservés © Faculté des sciences de l'administration, Université Laval, 2010

Ce document est protégé par la loi sur le droit d'auteur. L'utilisation des services d'Érudit (y compris la reproduction) est assujettie à sa politique d'utilisation que vous pouvez consulter en ligne.

https://apropos.erudit.org/fr/usagers/politique-dutilisation/

Cet article est diffusé et préservé par Érudit.

Érudit est un consortium interuniversitaire sans but lucratif composé de l'Université de Montréal, l'Université Laval et l'Université du Québec à Montréal. Il a pour mission la promotion et la valorisation de la recherche.

https://www.erudit.org/fr/

Assurances et gestion des risques, vol. 78(1-2), avril-juillet 2010, 157-182 Insurance and Risk Management, vol. 78(1-2), April-July 2010, 157-182



Global Best Practices in Insurance Claim Cycle Time & Leakage

par Shishir Kumar

ABSTRACT

Insurers are losing huge amounts of money to fraudulent claims. To cope up with soaring claims, insurers are adopting the best claim practices to transform their operating model. However, they are still reluctant because their investment on technology should be justified with financial prudence.

The study covers the best service practices and technologies implemented by various insurers during 2003-07. It reveals that majority of claim technologies have been implemented in the P&C segment. U.S. and UK accounted majority of the claim technology implemented. Insurers have been more focused towards claim administration & Processing globally. Aviva emerged as a leader in the claim technology implementation and deployment of radically innovated technologies.

RÉSUMÉ

Les réclamations frauduleuses en assurance génèrent des pertes financières énormes. Pour contrer ce fléau grandissant, les assureurs ont adopté des bonnes pratiques en matière de réclamations modifiant substantiellement leur manière d'opérer. Cependant, ils sont encore hésitants dans la mesure où leur investissement technologique doit reposer sur une gestion financière prudente.

Cet article recouvre les meilleures pratiques mises en œuvre par divers assureurs durant la période entre 2003 et 2007. Il constate que la plupart des innovations

The author:

Shishir Kumar is presently working as a Deputy Principal, Shining Consulting (A Strategic Management Consulting Firm), Bangalore. He has expressed his own view, not the organization he belongs to. He can be reached at: anayst.shishir@gmail.com.

technologiques en matière de réclamation ont été faites dans la branche d'assurance biens et responsabilités, et développées en grande majorité par les assureurs américains et britanniques. Globalement, la focalisation s'est faite, en matière de réclamations, sur le plan administratif et informatique. Le chef de file à cet égard est la compagnie Aviva qui a su adopter des technologies radicalement innovatrices.

I. EXECUTIVE SUMMARY

Insurers are continuously struggling with the increasing claims cost. Claim leakage represents about 10 cents of every premium dollar across the industry¹. Insurers are losing huge amounts of money to fraudulent claims. To cope up with soaring claims, insurers are adopting the best claim practices to transform their operating model. Hence, they are deploying various claim strategies across insurance claim cycle.

To uncover the prevailing best practices, the study has been done for 5 years (2003-07). During the same period, quality of services as well as claim technologies was tracked. Total 101 claim technologies were tracked. The study reveals that insurers have been more focused towards claim administration and claim processing globally. It uncovers that there was decreasing claim technology implementation trend from 2003-05. Contrastingly, the trend shifted in favour of more deployment of claim technology during 2005-07 consistently. The majority of claim technologies (97%) have been implemented in the P&C segment. The report primarily focused upon the US and UK markets. U.S. and UK accounted 78% of the claim technology implemented during 2003-07. It reveals that majority of the claim technologies are being deployed in the matured or developed market. In UK, claim administration accounted majority with 80% in UK and 78% in US. Aviva emerged as a leader in the claim technology implementation, accounted 16% of technologies implemented. It also emerged as a leader with 80% in the radically innovated technologies. Radically innovation in claim technology merely accounted 5%.

The study covers the best service practices and technologies implemented by various insurers for enhancing the quality of services. The report also discusses about the best practices such as Mobile Claim Solution, Pay-As-You-Drive (PAYD), Fair Isaac Enterprise Decision Management, Digital Flood Mapping, Fraud Evaluation software, TIBCO BPM software etc. It also talks about emerging claim technologies such as Predictive Modeling and Telematics ecoinsurance. In addition, it also discusses about challenges faced by insurers such as inadequate deployment of technologies and insurers' reluctance to invest more on technology. Though technology deployment should be justified with financial prudence, future for insurers will depend upon the efficient claim technology implementation.

2. OBJECTIVE & RESEARCH METHODOLOGY

2.1 Objective

To study the best practices adopted by insurers in the areas of claim cycle time & claim leakage in the US, UK markets so that insurers could reduce the claim cycle time & claim leakage to enhance service and improve profitability. In addition, if the same company is operating in other markets, the report also tries to cover those markets

2.2 Research Methodology

- The report is based only on secondary data collection/ secondary research
- The study covers 5 years' technology development trend (2003-07) and its impact on the claim cycle time & leakage, productivity, profitability, customer satisfaction etc.
- Technology adoption trend has been be forecasted on the basis of 5-year's data availability

2.3 Limitations

- Data was not available for the ROI, total cost of IT ownership, saving etc.
- Majority of available information was pertaining to P&C/auto insurance segment.

3. INTRODUCTION

In the hyper competitive insurance landscape, companies are trying to differentiate themselves by offering innovative services. They are improving quality of service to sustain or advance their position. Companies are offering service guarantee. If they fail to meet the service guaranteed, they pay compensation. Thus, they are using various practices to change the way claims are managed to enhance the quality of services.

Insurers are continuously struggling with the increasing claims cost. According to the industry sources, leakage represents about 10 cents of every premium dollar across the industry². Insurance providers are losing huge amounts of money to fraudulent claims. Fraudulent claim pushes up the cost of insurance cover, and has a damaging effect on the economy. Fraud is estimated to cost the UK economy about £16 billion a year, or £655 for every household³. To cope up with such scenario, many insurers have recognized the need to improve the efficiency of their claims management process. They are focusing on reducing cycle time, detect fraud, reduce claim leakage, control losses etc. Hence, focus on the best practices has become a strategic tool for the insurers to streamline process and increase overall output at the lower cost.

Typically, claims handling costs account 10% to 15% of net earned premium; in contrast, claims payouts account 40% to 65%⁴. The cost of the claims process accounts for up to 80-85% of the total operational costs of European P&C insurers⁵. Thus, claim management offers huge opportunity for the insurers to contain cost and save hugely by implementing efficient claim processing. Re-engineering the claims function from end-to-end has become the strategic priority for the insurers. To exploit the rising potential of claim containment, insurers are implementing various technologies. Indeed, insurers have to radically change the way that claims are treated, if these ingrained costs are to be reduced.

This report primarily focuses on the best practices adopted by various companies to enhance the claim services as well as customer services. The report mainly covers companies existing in the US and UK markets. In addition, if the same company is operating in other markets, the report also tries to cover those markets.

4. TECHNOLOGY DISTRIBUTION IN CLAIM CYCLE

Technologies are helping insurance companies to transform claim cycle to improve claims response. To do so, insurers are deploying various claim technologies. The study tries to focus upon how technology has impacted each process of the claim cycle. The research study has been done for the year 2003-07.

Insurance claim cycle consists of following processes:

- Claim requisition
- Claim review
- Claim validation/claim evaluation
- Claim estimation
- Claim Administration/ Claim processing
- Claim settlement/ Preparation for payment

Claim Requisition – The process by which customer makes a claim.

Claims Review – The process by which insurers review the claims to determine liability and amount of payment for various services. The review may also include determination of eligibility of the claimant or beneficiary or of the provider of the benefit; determination that the benefit is covered or not payable under another policy; or determination that the service was necessary and of reasonable cost and quality.

e.g., Suncorp – Suncorp insurer helps the insurance agent to view the damaged vehicle and then approve the claim depending on the seriousness of the damage.

Claims Validation – The process by which an agent validates the authenticity of claims made. It helps insurers to avoid fraudulent claims.

e.g., Voice Risk Analysis – It helps insurers in interrogating the claimers to the check the authenticity of the claims made.

Claims Estimation – The process by which inspector estimates the claims associated with the different types of events.

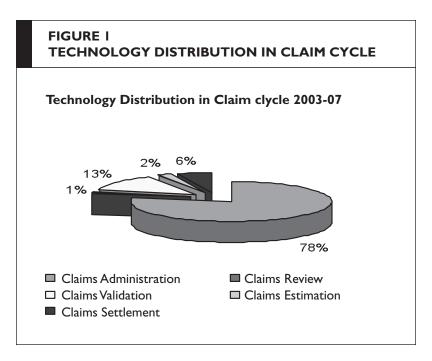
e.g., Digital Flood Mapping – It helps insurers to analyze and estimate premiums and claims.

Claims Administration/ Processing – Claims Administration component gives insurers a fully integrated approach for each step of the claims process, including notice of loss data capture, policy and coverage verification, financial processing and workload management. This approach gives insurance companies the power to reduce claims expenses, improve customer service and review claims data more accurately.

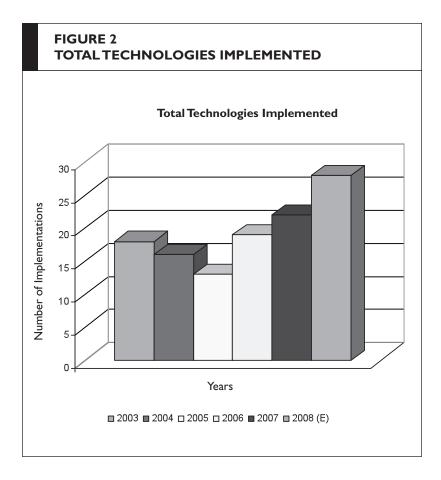
e.g., Pay-As-You-Drive / Black box – It helps insurance companies in monitoring the driving behaviors of a policy holders. It helps insurers in charging better equitable premium.

Claims Settlement – The process by which insurers distribute the settlement fund to the claimants, who are found eligible.

e.g., Claim Express – It helps the insurance company to monitor the repair status of the damaged auto and reduce time and effort to pay the insurance claims.

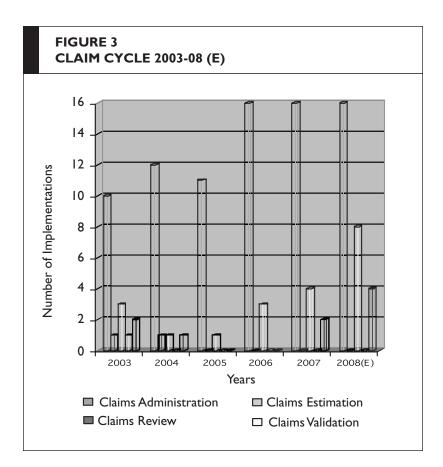


During 2003-07, total 101 claim technologies tracked. The study reveals that during 2003-07, insurers focused upon the claim administration. Claim administration technologies accounted 78% of the all technologies, followed by claim validation and claim settlement with 13% and 6% respectively.



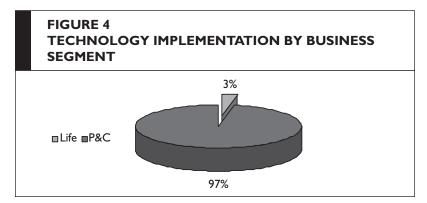
Graph shows that global claim technology trends in the last 5 years. It is quite noticeable that there was decreasing trend towards claim technology implementation from 2003 to 05. Contrastingly, it has shifted upwardly from 2005 onwards. Companies became more focused towards deploying more technology. During the year 2006, companies implemented 19 technology compared to 13 in the year 2005. Technology implementation has more than doubled from 13 to 28(E) in the last three year- 2005-08 (E).

There is a dramatic shift in the claim technology deployment. From 2003 to 2005, there was a constant decline in the technology implementation. Afterwards, it has been increasing. There is a consistent growth in claim technology deployment since 2006. There is a maximum growth during 2005-06. Though claim administration accounts majority of the technology deployment, claim validation technologies are gaining prominence. Growth of claim administration is constant from 2006-08(E)



5. TECHNOLOGY IMPLEMENTATION

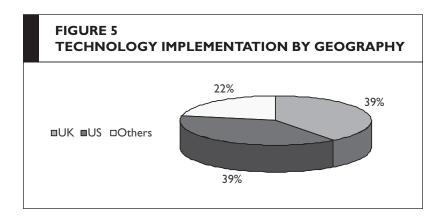
5.1 Technology Implementation by Business Segment



Insurance and Risk Management, vol. 78(1-2), April-July 2010

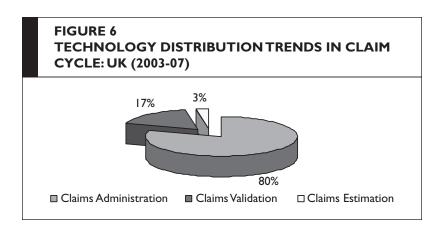
Majority of the claim technologies have been implemented in the P&C segment. Technology deployed in P&C segment accounted 97%. In stark contrast, technology implemented in the life segment accounted merely 3%. It can be well construed that all most all claim technologies are being deployed in the P&C segment.

5.2 Technology Implementation by geography

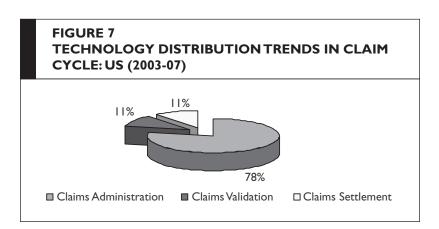


UK & US together accounts 78% of the technology implemented during 2003-07. Both UK & US accounted 39% respectively. It can be inferred that maximum implementation of the claim technologies are taking place in the matured/developed market.

Technology distribution trends in Claim cycle: UK



In UK, claim administration accounted 80% of the technologies implemented in the claims cycle. It was followed by the claim validation and claim estimation with 17% and 3% respectively. It clearly shows that UK insurers are in line with the existing trend of more deployment in the claim administration.



Technology distribution trends in Claim cycle: US

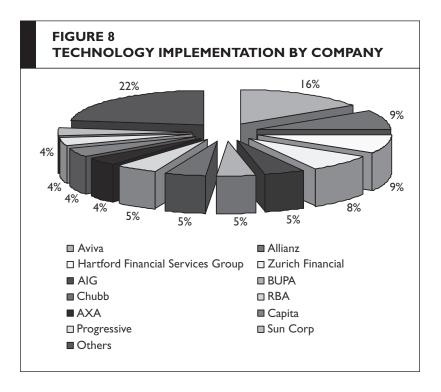
In US, similarly, claim administration technology accounted 78% of the technology deployed in the year 2003-07. It was followed by both claim validation and settlement with 11% respectively.

5.3 Technology Implementation by Company

Aviva emerged as the highest implementer of the claim technology. Aviva implemented highest of about 16% of technologies out of 101 claim technologies tracked during 2003-2007. Aviva is followed by Allianz, Hartford and Zurich financial with the implementation of 9% of the total technologies. Within the health segment, BUPA alone seems to highest implementer, with 5% of the total claim technologies.

6. TECHNOLOGY INNOVATION

Technology innovations have been segment into three segments- Radical, up-gradation and incremental.

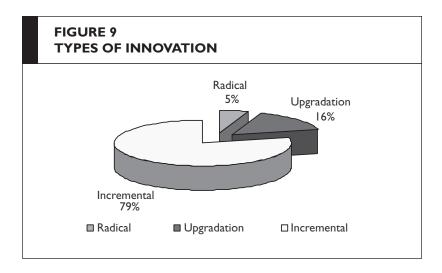


Radical Innovation: Implementing an entirely new technology; these types of innovation involve larger leaps of understanding, perhaps demanding a new way of seeing the whole problem and ability to take larger risks. These types of innovations have a long-tailed RoI curve and in the past some of these innovations have been path breaking while the others have been too unrealistic; wherein the business has been unclear on who will take the cost of these implementations.

Incremental Innovation: It is a step forward from the existing technological set-up, mainly responding to short-term goals by reacting to customer or employee needs.

Technology Upgradation: Technology that has been upgraded to a latest version, which can help in cost reductions or productivity gains

Total 94 technologies were implemented within 5 years, from 2003-2007. The study revealed that incremental innovation accounted 79% of the technology implemented. On contrary, radical innovation accounted merely 5% and technology up gradation accounted 16%. Companies implemented radically innovative technologies like Pay As You Drive, Digital Flood Mapping, Telematics



eco-insurance in the P&C segment, whereas GP response technology in the life insurance segment. Aviva emerged as the most radically innovative companies. It accounted 80% of the total radically innovative technologies. Of the total radically innovative technologies of 5, Life segment accounted only 20% with merely implementation of 1 technology. In the Life segment also Aviva emerged as leader in the radical innovative companies. It is well construed that insurance sector is still laggard in technology innovation.

7. GLOBAL BEST PRACTICES

Enhancement of the claim services is becoming critical element of success in the insurance business. John Raguin, CEO, Guidewire Software Inc., said, "Pressure to improve claims operations is coming from multiple fronts. First, there are societal pressures, such as the growth of medical inflation, shifting workforce trends and increasingly demanding customers. At the same time, the trend is also being driven by industry forces such as an increased awareness of so-called "claims leakage," or the difference between the appropriate cost of settling a claim and its actual cost. Other factors include the softening market, concerns about industry-wide underreserving and access to improved technology." Hence, companies are adopting best practices of other companies. It helps companies to assess their performance and learn ways to improve services. Adoption of such practices gives them a competitive edge.

7.1 Quality of Service

Increasing competition and growing customer expectation are forcing companies to improve the quality of service. Companies are trying to carve the niche by embarking upon various service strategies. Companies are giving service guarantee. For example, ING Canada guarantees that within 30 minutes of call, customer will be talking to an ING Insurance representative, who can confirm coverage, make decisions, and provide emergency support and crisis advice. Other companies such as AXA Portugal also offer emergency services. In case of accident, customer can contact AXA within 90 minutes. In turn, AXA claims to examine the situation within 24 hours.

Companies are offering service guarantee. If they fail to meet the service guaranteed, they pay compensation. For an example, Fortis Belgium pays €5200, if it fails to meet the service guaranteed, which seems to be the highest in the industry. Zurich Canada also offers partial payments and final payments for a claim within three business days from the receipt, by the Zurich Claim representative, of the customer's agreed upon, signed, and proof of loss. It also promises to pay an appropriate penalty - as decided by customer (maximum applies) on failure to comply with any of the five claim service agreements.

In addition, insurers are offering quicker claim settlement to improve the service quality. GEICO settles many property damage claims within 48 hours. A property damage claim with no liability dispute is often settled quickly. Most claims are settled quickly and never result in a lawsuit. If you are sued, notify GEICO immediately. GEICO will arrange for an experienced attorney to defend and advise you. Many lawsuits are settled before they go to trial. If car can be driven safely, a GEICO Claims Representative will arrange for a Drive-In inspection, usually within 24 hours and provided having the appropriate coverage on the car (Comprehensive or Collision depending on the facts of the loss.). If policy covers rental reimbursement, Claims Representative will help in arranging for a rental car while the car is being repaired. Its Auto Damage Adjusters inspect the damage and prepare a written estimate. The inspection process averages 20 - 30 minutes. If your car is not safe to drive, an Auto Damage Adjuster will inspect the car at a location you determine. Customer can even report Mechanical Breakdown Insurance (MBI) claim in about 15 minutes, 24 hours a day, 7 days a week.

St. Paul Travelers initiates action on all new claims within 48 hours. It returns all telephone calls within 24 hours. It responds to all

communication from policyholders within 10 days at most. It provides quarterly updates to the policyholder on every claim. It makes claims data available over the internet. It seeks agreement from the policyholder on every liability decision. It provides full access to a network of claims inspectors.

Insurers are trying to settle the claim fast. Company like Progressive initiates normal claims procedures within 9 hours. And, it tries to settle 50% of its claim within 9 hrs. It helps in increasing customer satisfaction. Customer satisfaction plays vital role in retaining and cross- selling the product. Company like Chubb has attained 99% of customer satisfaction. In the similar manner, Aviva Canada achieved 97% customer satisfaction in average over all the business lines. However, exceeding customer satisfaction remains the gigantic task as customers demand competitive pricing, adequate coverage and 24-hour customer service.

7.2 Technology

The traditional claims operations are becoming obsolete. World-class claim operating model is really becoming a fundamental competitive asset for every company. Technology has been playing pivotal role in enhancing claim services. It has radically changed the way claims are processed. In order to improve quality of service, companies are using various claim technologies. These technologies help in providing efficient services at the lower cost. Followings are technologies, which have been deployed by insurers.

Claim Validation

"Voice Risk Analysis (VRA)" technique has been implemented by Allianz Cornhill, HBOS etc. are using. The use of VRA indicated that, in certain categories, as many as 30% of all claims were worthy of further review. Upon investigation, over 40% of the claims that underwent further review were subsequently withdrawn by the claimant, repudiated or resulted in a detailed fraud enquiry. Apart from saving money, the technique speeds up the process for genuine claims, pleasing both the customer and the insurer. Voice risk analysis works by identifying changes in the frequency, pace and pitch of the claimant's voice and by analyzing answers to a questionnaire designed to detect signs of undue stress as a result of hiding the truth. It will take into account levels of distress that may already be present as the result of the incident leading to the claim, such as the loss of valued or expensive items.

TABLE I – GLOBAL BEST PRACTICES: TECHNOLOGY IMPLEMENTATION IN THE CLAIM CYCLE TIME & LEAKAGE

Technology	Quantitative Benefits		Qualitative Benefits
	Time	Cost	
Mobile Claim Solution	 Increased efficiency Improved payment cycle 		• The ability to instantly move information back and forth between a laptop and a mainframe and keep claims mov- ing towards resolution is a major advantage
			• Immediate response service boosts profit through the elimination of inspection and repair delays, improved customer morale, decreased risk of fraud, and lowered monthly premium
			• Increased customer satisfaction and retention
Pay-as-you- drive		Offered saving upto 30% on car insur-	• Reduce claim and charge better equitable premium from the customer
		ance	• Global Positioning Satellite (GPS) technology to record the journey of the car/vehicle
			• GPS helped in reducing and charging better equitable premium to the customers
			• Pay-as-you-drive element of the bill is added to a fixed element that is based on the driver's car, age, sex and claim history etc.
	Mobile Claim Solution Pay-as-you-	Time Mobile Claim Solution • Increased efficiency • Improved payment cycle Pay-as-you-	Time Cost Mobile Claim Solution • Increased ef- ficiency • Improved pay- ment cycle • Pay-as-you- drive Offered saving upto 30% on car insur-

BUPA	Citrix		• Solved 75% of its users' IT queries without ever visiting the desktop
			 Improved faster claim processing and more responsive customer service
			• Saves man-hour in terms of traveling
NFU Mutual	Insurance Face Solution		• Supported end-to-end business processing throughout the lifecycle of an insurance policy from quotation to claim
			• Customers could see the benefit in terms of increased flexibility in improving customer service and efficiency
Allianz Cornhill/ HBOS	Voice Risk Analysis (VRA)	• 12% fraudulent claims were with- drawn	• The technique speeds up the process of genuine claim
RBS	Fair Issac Enterprise	• Reduced fraud 50% in 12 months	• RBS achieved rapid ROI, reducing losses dramatically in 2 months
	Decision Management	 Improving its claim fraud detec- tion by 30% to 60% 	 Speeding the time for processing for bodily injury and personal injury protection (PIP)
		• Reduction of the insurer's expense ratio(ER) by 15% to 20%	

ΑΧΑ ΟΥΑΚ	SAS Solution for Analytics &SRM	Reduced the time in producing analytical reports by 70% to 100%	 Discovered the 5% of its claims payout were fraudulent Reduced fraudu- lent claim by 5% to7% 	• Started quickly finding the relationships between cus- tomer behavior and fraudulent claims, saving staff time, preventing losses, and discouraging future abuses of the insurance system
Aviva	Digital Flood Mapping			 Technology enabled to understand underwriting risk better and tailor prices more closely to individual circumstances Because of the level of detail provided by the map, people who previously thought their property was uninsurable could obtain cover
Ανινα	GP Response	• The time it takes to get form back has been cut by a third, which means 14 days fewer in the longest cases		

Alianz	TIBCO BPM Software	 Process automation enabled 80% increase in efficiency With claim processing from weeks to days Information reloads, which used to take 30 minutes, has been reduced to 30 seconds 	• Secured ROI in 6 months	 External third parties can view new and existing claims and request work online without having to speak to agents Integrate internal and external process into single, streamlined claim processing method, and integrate its business process management and electronic document management systems
ММА	Fraud Evalation Software		 Saved MMA 5 times as much in claim leakage as the company paid for the service The numbers of claim declined or withdrawn by 63% and reduced investigation cost per claim by 47% 	

CUNA Mutual	Claim Express	 Decreased in claim process payment backlog by 75% and increased in au- tomatic payment by 30% Decreased the time from claim to payment from 20 days to only 5 	• Achieved ROI within 6 months	
Ohio Casualty Group	Web-based claims work- flow solution	 Helped in reduc- ing turnaround times-from loss reporting to esti- mate completion by 50% 		 Increased productivity and reduced turnaround by streamlining the workflow process Significantly reduced claims cycle times
RSA(MORE TH>N)	Telematics eco-insurance		 Customer could save an average £120 per year in fuel cost 	• The system will measure behavior such as the number of short journeys taken, excessive speed, over-revving, over acceleration, and idle time leaving the motor running
Progressive	Predictive Modeling		• Achieved a reduc- tion in claim costs from 5% to 10%	 Assisted in better identifying and segmenting insurance risks, which could lead to improved underwriting, pricing and marketing decisions Helped insurers improve their rating plans by identifying mispriced risks.

"Fair Issac Enterprise Decision Management" technology has been implemented by Royal Bank of Scotland (RBS). By using this technology, RBS reduced fraud 50% in 12 months, with no impact on acceptance-into reality. EDM ensured that fraud goals were in harmony with the other parts of the business. It also helped RBS achieve rapid ROI, reducing losses dramatically in 2 months- without impacting card acceptance. As a result of the technology, the insurer reported not only improving its claims fraud detection by 30% to 60%, depending on the line of business, but also speeding the time for processing certain claims-those with bodily injury and personal injury protection (PIP). An added benefit was the reduction of the insurer's expense ratio (ER) by 15% to 20%. The EDM approach made this possible through the application of rules and analytics, automating key processes. These included the assigning of claims to the most appropriately qualified adjusters, ordering further reports and inquiries based on their expected value to the investigation, and combining data from different sources to check the validity of claims.

"SAS solutions for Analytics & SRM" is being used by AXA. Using SAS, AXA OYAK started quickly finding the relationships between customer behavior and fraudulent claims, saving staff time, preventing losses and discouraging future abuses of the insurance system. AXA OYAK discovered that 5% of its claims payouts were fraudulent, and these can now be corrected and prevented in the future. AXA reduced paid claims by 5 to 7%. With SAS, AXA has reduced the time it took to produce analytical reports by 70 to 100%.

Claim Estimation

"Digital Flood Mapping" technology enables to understand underwriting risks better and tailor prices more closely to individual circumstances. This technology is being used to pinpoint the risk of river flooding to individual properties. Insurer believes that more people are likely to benefit from the flood map because in some cases it may indicate that their property isn't in fact at risk or won't flood as often as previously thought. Because of the level of detail provided by the map, people who previously thought their property was uninsurable could now obtain cover. The ability to pinpoint whether an individual house is on a hill or raised ground, and how floodwaters will flow, is invaluable in the fight against flood damage. Aviva is using this technology.

Claim administration

"Mobile Claims solution" is being used by Progressive Inc. Progressive has 3,000 Independent Response Teams. Immediate response team undertakes

survey within 45 minutes of incident and handle claims on the spot. They (agent) travel by motorcycles equipped with web-enabled computers (wireless PDA), retrieve details and send pictures of damaged cars to motor shops and get estimates back. If the pay-out amount is accepted, cheque is given on the spot to the customers

"Pay As You Drive (PAYD)" insurance technology gives win-awin situation for insurers as well as insured. Such technology helps companies to reduce claim and charge better equitable premium to the customers. The technology gives drivers better control. Pay-asyou-drive policy cuts premiums by up to 30% per year for some drivers, such as those who don't use their car in the morning rush hour (6 am to 11 pm). Hence, setting high rates for late-night driving at a high enough level is to encourage young drivers not to use their vehicle at this time. Savings varies from driver-to-driver. As far as premium is concerned, pay-as-you-drive element of the bill is added to a fixed element or 'line rental' that is based on the driver's car, age, sex and claims history. Additionally, the 'black box' device is fitted discreetly into the car and uses Global Positioning Satellite (GPS) technology to record the journeys of the car. This information is then transmitted securely to insurer via a mobile phone network. The premium is calculated in a similar way to mobile phone tariffs. Aviva Norwich Union, Progressive Inc. are using this radically innovative technology. Royal SunAlliance (RSA) and Zurich is also using similar technology named -"Pay HOW You Drive."

"Citrix Presentation Server" helps in delivering applications to new users by merely giving them a device and a connection to the network. It improves faster claims processing and more responsive customer service, as well as greater rewards for the employee BUPA is using this technology. With its use, BUPA solves 75% of its users' IT queries without ever visiting their desktop. With so many locations across the country, this obviously saves man-hours in terms of traveling. It provides a standardized IT infrastructure for global expansion.

"InsuranceFaces solution" supports end-to-end business processing throughout the lifecycle of an insurance policy from quotation to claim. NFU Mutual has implemented InsuranceFaces solution. It will consolidate NFU Mutual's existing legacy systems into a single, flexible application across the whole of the general insurance business process. Customers will see the benefit in terms of increased flexibility in terms of improving customer service and efficiency.

"GP Response" technology is being used in the life insurance segment. This technology helps in reducing end-to-end claims time. Aviva has developed systems to capture information from the customer and transfer it directly to a claim form. This enables the assessor to ensure the claim form is completed as fully as possible, to deal with issues immediately and obtain a greater depth of information. The time it takes to get the form back has been cut by a third, which means nearly 14 days fewer in the longest cases.

"TIBCO's BPM software" integrates both internal and external processes into a single, streamlined claims process. Allianz Ireland has deployed TIBCO BPM Software. As a result, Allianz can dynamically share documents with customers and brokers. Work reallocation function automatically reassigns work from absent or overloaded employees to the rest of the team to complete. It has benefited company significantly. As a result, process automation enables 80% increase in efficiency, with claims processing reduced from weeks to days. External third parties can view new and existing claims and requestwork online without having to speak with agents. Information reloads, which used to take 30 minutes, now take just 30 seconds. Allianz has achieved ROI in six months.

"Fraud evaluation software," by CSC, is being used by MMA. The technology has saved MMA five times as much in claims leakage as the company paid for the service, increased the number of claims declined or withdrawn by 63% and reduced investigation costs per claim by 47%. The technology is definitely delivering real business benefits in claims fraud reduction.

Claim Settlement

CUNA Mutual has implemented "Claim Express" technology in the life business. The Claims Express initiative originated in the need to tighten up the process for disability claims, which make up roughly 90 % of CUNA's claim volume. The system includes business-rules-driven processing that enables 30% of claims to be paid automatically, adding that by minimizing reliance on human interpretation of each claim, it has improved payment accuracy and delivered efficiencies, such as decreasing payment backlogs by 75%, decreasing the time from claim to payment from 20 days to only five. It has achieved ROI on the first incarnation of Claims Express within six months -- owing in part to a 15% improvement in payment accuracy. Among the results of CUNA's efforts were a 40% to 90% increase in best practice adherence and a further 15% improvement in payment accuracy in 2006, according to Everson. Process fine-tuning also sped members' return to work from 7.9 months to 6.9 months.

"Web-based claims workflow solution" has been installed by Ohio Casualty Group. It is for auto physical damage claims, a realtime data networking solution aimed at increased productivity and reduced turnaround by streamlining the workflow process. The technology helps in reducing turnaround times -- from loss reporting to estimate completion – by 50%.

7.3 Emerging Technologies

"Telematics eco-insurance" technology is being piloted by MORE TH>N (RSA). This technology will monitor how green their driving behaviour is and send them regular reports on how well they are doing and tips to help them drive more efficiently. The system will measure behaviours such as the number of short journeys taken, excessive speed, over-revving, over-acceleration, and idle time leaving the motor running. According to the Energy Saving Trust, by driving in a greener way people can save an average of £120 per year in fuel costs. If the product gets success, MORE TH>N will look to expand the scheme in 2008.

"Predictive Modeling" enables organizations to identify specific customers with greater or lesser risk, and then assess them accordingly. Through predictive modeling, companies are able to identify those claims that are likely to represent the greatest loss exposure. By pinpointing the high-value claim, and then applying leading claim practices, proven business rules, and experienced claim resources, insurance companies have been able to achieve meaningful improvements in claim outcomes. While companies that implement predictive modeling typically achieve a reduction in claim costs of 3% to 5%, some attain savings of as much as 5% to 10%. Company like Progressive is using this technology to remain at the competitive edge.

8. CONCLUSION

Companies like Aviva emerged as a leader in claim technology deployment. However, it deployed merely 3 technologies on y-o-y basis. It is followed by Allianz, Hartford and Zurich financial with the implementation of about 2 technologies y-o-y basis. It can be well construed that insurers are still reluctant to invest more on technology. Of these, majority of implementations are taking place in the matured market like UK and US, which together accounts 78% of the claim technology. Other markets, such as Asian and others are yet to see the more deployment of such technologies.

Majority of insurers' technologies seem to be inadequate in handling soaring insurance claims. Updating the claims process via technology has been hindered by concerns over the amount of capital required. Even small brokers are feeling compelled to invest comparatively large amounts of money to maintain continuity of business and their relationships with larger underwriting operations. Though cost of claims administration represents over 60% of an insurers' claims process, even small improvements in efficiency can amount to a major saving. If the cost of administering claims can be reduced the savings can immediately have a positive effect on premium levels and therefore customer satisfaction. In effect, this means that the claims process is one area of the insurance business process that typically shows a very strong ROI when the technology case is considered.

Margins of the insurers are constantly under pressure. Hence, future success of the insurers will depend upon the efficient claim handling. Complete integration of back-office processes, information systems, and involvement of seamless communication between third parties will become a necessity to manage claim. However, increasing focus must be paid to the "technical" aspects of claims, especially levels of leakage, which typically runs at about 5% of UK insurance industry claims annually. Mitigating the risk of leakage clearly depends on immediate access to accurate, up-to-date and complete information relating to the claim. Technology will play a vital role in enhancing the business process to ensure that the right information is delivered to the right people within the claims department at the proper time. However, competitiveness of insurers will depend upon the innovative technology deployment.

References

- "Progress made with insurance fraud despite huge problems," http://www. insurance-business-review.com/article_feature.asp?guid=83C8B174-C88C-4CEF-ACAD-9D1212B3B401, November 09, 2006.
- http://goliath.ecnext.com/coms2/gi_0199-2656095/Claims-tech-can-stop-leakage.html#abstract
- "Improve the efficiency and effectiveness of your claims decisions," http:// www.fairisaac.com/fic/en/industry/insurance/claims-management/

- http://www.fairisaac.com/NR/rdonlyres/02590268-630C-4450-AF93-1664FA853D92/0/RoyalBankScot_CS_707.pdf
- http://www.fairisaac.com/NR/exeres/0FEB8FD7-94A9-4C02-A232-161148678666,frameless.htm
- "e-Enabling the Claims process," http://www.harlosh.com/news_eenabling_ claims.htm
- http://www.aviva.com/index.asp?PageID=55&category=aviva&year=2007&ne wsid=2983http://www.aviva.com/index.asp?PageID=55&category=aviva &year=2006&newsid=2586
- http://www.aviva.com/index.asp?PageID=55&category=aviva&year=2005&ne wsid=1971
- http://www.citrix.com/English/aboutCitrix/caseStudies/caseStudy. asp?storyID=6973
- http://www.harlosh.com/news_nfu.htm
- http://www.harlosh.com/news_eenabling_claims.htm
- http://www.professionalbroking.co.uk/200067
- http://www.sas.com/offices/europe/uk/solutions/customer_successes/axaoyak. html
- http://www.aviva.com/files/reports/2003ar/report/core_files/html/op_rev_genins_0.html
- http://www.aviva.com/files/reports/2003ar/report/core_files/html/op_rev_ genins_0.html
- http://www.aviva.com/index.asp?PageID=55&category=aviva&year=2006&ne wsid=29
- http://www.prnewswire.co.uk/cgi/news/release?id=118387
- www.tibco.com/resources/customers/successstory_allianz.pdf
- http://whitepapers.techrepublic.com.com/casestudy.aspx?docid=154587
- http://www.csc.com/industries/insurance/casestudies/2169.shtml
- http://www.insurancetech.com/news/showArticle.jhtml?articleID=205210488 &pgno=4
- http://www.royalsunalliance.com/royalsun/media/showpressitem.jsp?type=pre ss&ref=391&link=4&sub=56&sup
- "Predictive Modeling Strategies: Applying science to claim management," Deloitte, 2006.
- http://www.citrix.com/English/aboutCitrix/caseStudies/caseStudy. asp?storyID=14984
- Rodd Zolkos, "Improving claims operations offers big benefits, but efforts require broad, considered approach," http://www.businessinsurance.com/cgi-bin/industryFocus.pl?articleId=15494, October 18, 2004.

Notes

 $\label{eq:linear} I. \ Source: \ http://www-935.ibm.com/services/us/gbs/bus/pdf/bcr00261-loss-analysis-and-warning-solution.pdf$

3. Source: www.abi.org.uk/content/contentfilemanager.aspx?contentid=24901

4. "Claim Management in Life Insurance," Source: http://www.scribd.com/ doc/14217786/Project-on-claims-management-in-life-insurance

5. "Claims automation in Europe: opportunities in P&C insurance," Source: http://www.marketresearch.com/product/print/default.asp?g=1&productid=886868

6. Note: Enough data were not available for 7 technologies. Total 101 claim technologies tracked during 2003-07.