

# Global Trends in Non-Life Insurance 2012: Claims

**Key trends and implications for claims in the non-life insurance industry**



# Table of Contents

<b>1. Highlights</b>	<b>3</b>
<b>2. Introduction</b>	<b>4</b>
2.1. Global Non-Life Insurance Performance	4
2.2. Insurance Value Chain	5
<b>3. Trends in Non-Life Insurance for Claims</b>	<b>6</b>
<b>4. Trend 1: Focus on Claims Transformation</b>	<b>7</b>
<b>5. Trend 2: Adoption of Advanced Analytics and Predictive Modeling</b>	<b>10</b>
<b>6. Trend 3: Use of Social Data to Detect Fraud</b>	<b>12</b>
<b>References</b>	<b>15</b>

# 1. Highlights

The global non-life insurance industry witnessed a modest 1.9% growth (in real terms) in premium volumes during 2011. The global economic slowdown, particularly in Europe was the primary culprit. Sluggish growth was somewhat offset by the trend of rising premium rates in certain regions and lines of business. Overall, however, industry profitability remained under pressure globally as a result of record losses from 2011's catastrophic events and a sub-par investment environment. Growth, in premium volume and profits, appears uncertain for the near future, as the slowdown in Europe and North America continues to forestall economic growth in Asia-Pacific.

The non-life insurance industry is experiencing shifting trends across the front office, policy administration and underwriting, and claims – the three core functions of the insurance value chain. This paper examines key emerging trends in the claims function of non-life insurance companies.

The claims function is not only the major part of an insurer's expenses, the settlement process, itself, also determines the customer experience, which, of course determines retention rates. To achieve operational excellence and enhance customer satisfaction, there is an increased focus on claims transformation. To that end, non-life insurers are looking to eliminate inefficiencies and reduce claims-related expenses.

There is a significant opportunity to leverage advanced predictive modeling techniques in the claims process. An early identification of claims with high probability of large losses and risk of fraud will allow insurers to proactively manage the settlement process. This will help reduce fraud-related costs – and improve customer experience.

A sharp rise in social media offers abundant opportunity for non-life insurers to utilize the information generated on these platforms. Social media platforms may provide a significant amount of information related to claimants and incidents during fraud investigation of a claim. While a number of non-life insurers have already started manual investigation, an automated capability will allow insurers to leverage social data to its full potential.

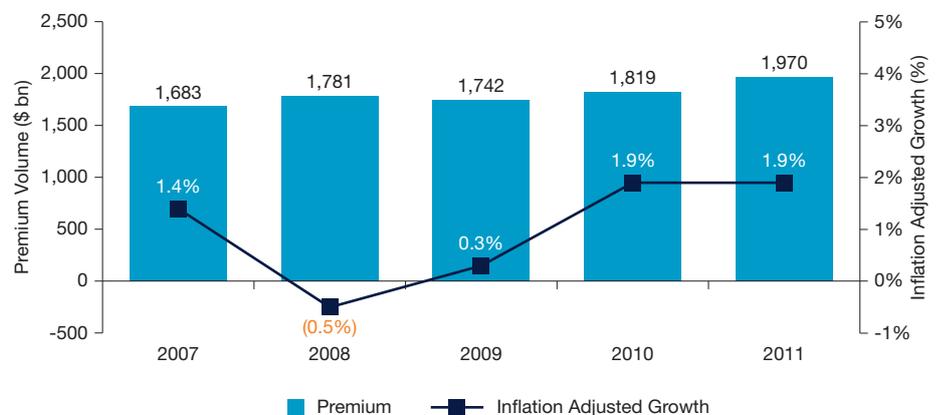
## 2. Introduction

### 2.1. Global Non-Life Insurance Performance

After a 2010 post-crisis recovery of 4.1%, worldwide economic growth in 2011 weakened to 2.7% real GDP.<sup>1</sup> This slowdown had a negative impact on the global insurance industry, and direct premiums dropped by 0.8% in real terms – primarily led by a decline in the life insurance sector. The near future looks uncertain for the global insurance industry, primarily because of the ongoing economic crisis in Europe. Emerging markets, however, are expected to continue their growth, although at a slower rate, while the United States is likely to experience moderate growth.

Global non-life insurance premiums grew at a moderate (real) rate of 1.9% in 2011.<sup>2</sup> This growth was primarily caused by an increase in the premium rates in certain geographies and lines of businesses. Advanced economies experienced a minimal 0.5% growth in premiums due to recession in Europe and weak growth in the United States. On the other hand, emerging markets continued their robust growth with a 9.1% rise in premiums, although at a slower pace compared to 2010.

Exhibit 1: Global Non-Life Insurance Premium Volumes (\$ bn) and Inflation Adjusted Growth (%), 2007–11



Source: Capgemini Analysis, 2012; Swiss Re Sigma Reports, 2009-12

1 *The Global Outlook* in Summary, 2010-2014, World Bank, <http://web.worldbank.org/external/default/main?theSitePK=659149&pagePK=2470434&contentMDK=20370107&menuPK=659160&piPK=2470429>

2 "World Insurance in 2011," Swiss Re, May 2012

Forecasted slow growth in the North American economy and a recession in several European countries are expected to continue to put pressure on the growth of the non-life insurance industry in these regions in 2012.

Significant catastrophic losses during 2011, particularly in Australia, Japan, and New Zealand, negatively impacted the profitability of the overall non-life insurance industry. Investment income was also truncated in the prevailing low interest rate environment.

Forecasted slow growth in the North American economy and a recession in several European countries are expected to continue to put pressure on the growth of the non-life insurance industry in these regions in the near future. Premium growth in Asia-Pacific is expected to remain robust (and support global premium growth). However, this growth could remain lower than that in the recent past mainly due to slower economic growth in the region.

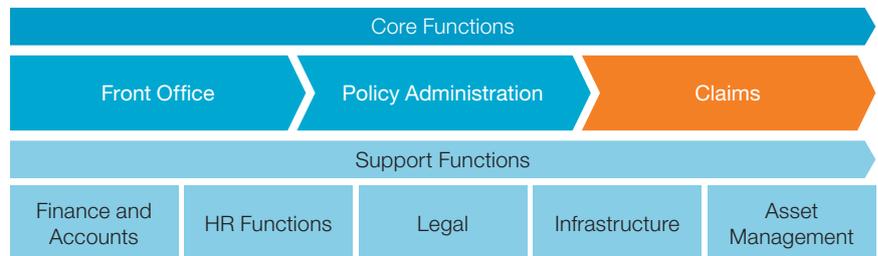
## 2.2. Insurance Value Chain

Insurance companies' operations can be broadly divided into three core elements, representing a value chain:

- Front Office
- Policy Administration and Underwriting
- Claims Processing and Payout

Along with these three core elements, a range of support functions are required to ensure an insurance firm's operational efficiency. These support functions include finance and accounting, HR, legal, infrastructure, and asset management.

Exhibit 2: Insurance Value Chain



Source: Capgemini Analysis, 2012

This paper focuses on the claims processing and payout function of the insurance value chain for non-life insurers. It identifies key trends in the claims function and their potential implications.

# 3. Trends in Non-Life Insurance for Claims

Non-life insurers seek the capability for early identification of high-risk claims cases and potential frauds. These requirements are driving an increased adoption of predictive modeling solutions.

The claims function forms a major component of expenses for the non-life insurance industry, which is why insurers continue to look for ways to reduce claims-related losses.

Although there has been steady investment in the claims function by non-life insurers, a number of insurers still have limited automation, multiple inflexible legacy systems, and manual paper-based processes. Changing customer demands, increased regulations, and new and growing technological advancements, are also driving an increased focus on transforming outdated claims inefficiencies.

Non-life insurers seek the capability for early identification of high-risk claims cases and potential frauds. These requirements are driving an increased adoption of predictive modeling solutions. As fraud continues to remain a primary concern for the industry, insurers are looking to leverage social media data to improve their fraud detection capability.

These changes have led to the emergence of the following key trends in claims processing and payout for non-life insurance companies globally<sup>3</sup>:

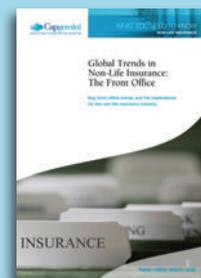
1. Enhanced focus on claims transformation
2. Increased adoption of advanced analytics, such as predictive modeling
3. Increasing usage of social data for fraud detection



Global Trends in Non-Life Insurance 2011: Claims



Global Trends in Non-Life Insurance 2011: Policy Administration



Global Trends in Non-Life Insurance 2011: The Front Office

<sup>3</sup> Trends shown are not necessarily comprehensive, but have been highlighted due to their relevance and potential impact on the industry

# 4. Trend 1: Focus on Claims Transformation

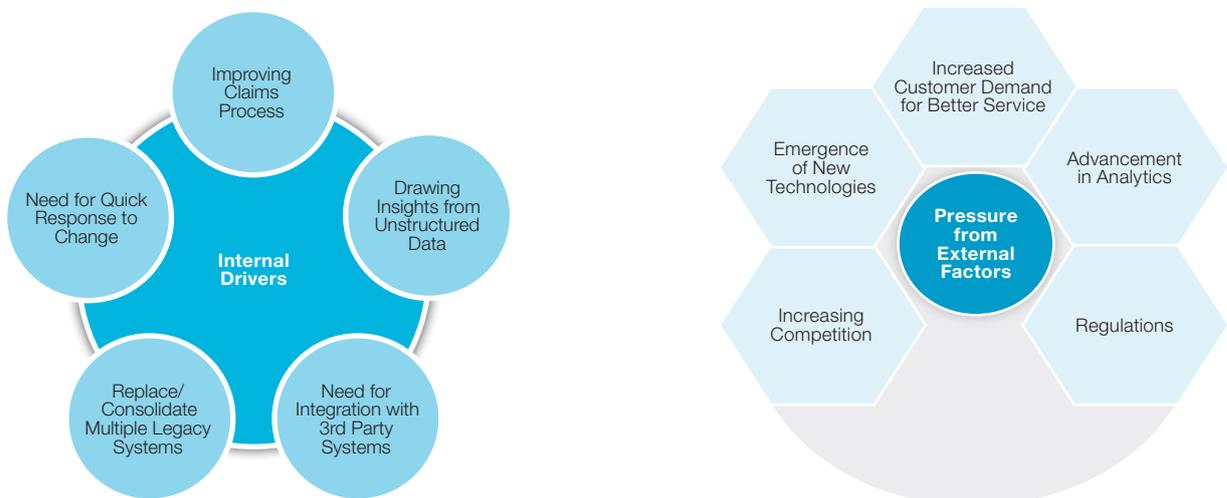
## 4.1. Background and Key Drivers

The claims function is more than merely an expense item for an insurer. It can often be the defining moment in the customer/insurer relationship. Effectiveness and efficiency of the claims settlement process are key differentiators determining the customer experience.

While the claims function has a direct impact on profits and customer satisfaction, non-life insurers continue to suffer a number of challenges with the current state of claims management. An inefficient claims process leads to customer and internal staff dissatisfaction, and consequently, high customer and staff turnover.

The administrative tasks in the claims function currently take significant staff time, thus leaving less time for adjudicating claims, costs tend to run higher. To help trim these costs, insurers are looking to build the capability to respond to regulatory changes and enhancement requirements, quickly and effectively. However, their response time and effectiveness is often limited by an inflexible and inefficient claims process. Insurers suffer from large amounts of unstructured and redundant data, which has limited utilization in generating actionable insights. In order to achieve fast and easy claims settlements, there is a growing need for integration between insurers and third-party service provider's (e.g., auto repair shop) system.

Exhibit 3: Drivers for Claims Transformation



Source: Capgemini Analysis, 2012

External pressures from customers, competition, technology, and regulations also drive a need for claims transformation for insurers. With declining profits, the non-life insurance industry is witnessing increased competition for customer retention and acquisition. According to a recent Gartner survey conducted in the United States, customer retention emerged as the top priority for P&C insurers, with 81% of respondents indicating it as extremely important.<sup>4</sup> Customers are demanding a better claims experience with fast settlement, self-service ability, better accuracy, and improved communication. New technologies, such as mobile, location-based solutions, social media, and cloud-based solutions are offering an opportunity for insurers to provide more customized and a faster claims process for its customers.

Advancements in analytics and business intelligence solutions allow insurers to analyze the huge amount of data (historical, current, third-party) derive insights/ trends, and surface the data in dashboards and scorecards. As regulations and capital adequacy requirements change, insurers are looking to build flexible insurance systems allowing quick response times.

## 4.2. Analysis

As discussed in Section 4.1, internal challenges and external pressures are driving a need for claims management. To quote a 2012 Gartner study,<sup>5</sup> “Companies are undergoing an entire renovation of claims technologies and processes to meet business objectives, such as operational efficiency and customer satisfaction.”

In order to achieve this operational excellence and customer satisfaction, the claims transformation programs are focused on the following endeavors:

### End-to-End Automated Process with Straight through Processing

The majority of non-life insurers are investing to build an automated end-to-end claims process, thus offering a faster, more accurate, and efficient claims process. Insurers are implementing straight through processing (STP) to accelerate the settlement process. However, end-to-end STP can only be implemented in simple claims, such as auto windshield, mainly in personal lines. Most of the personal and commercial lines claims need significant manual intervention making it difficult for an STP. By reducing the number of hand-offs and unnecessary process delays, STP not only reduces claims settlement time but also reduces operating costs and improves customer experience.

<sup>4</sup> Gartner, Inc., “North American P&C Insurers: Shifting Focus to Customer Retention, Core Systems Replacement and Technology Evolution,” Kimberly Harris-Ferrante, 13 March 2012

<sup>5</sup> Gartner, Inc., “Hype Cycle for P&C Insurance, 2012,” Kimberly Harris-Ferrante, 27 July 2012

### Using Business Intelligence and Advanced Analytics

Insurers are increasingly leveraging business intelligence (BI), reporting solutions, KPI (key performance indicators) dashboards, data mining, and advanced analytics, such as predictive modeling, to manage and analyze claims data. These tools allow a detailed analysis of the claims process to identify leakage, potential high loss claims, and fraud management, thereby improving the process and controlling costs.

### Building Customer Self-Service Capability in Claims

Insurers are building claims self-service features including claims intimation, claims-related documents/photos uploading, status checks, and notification through mobile/internet. Insurers also benefit from an expanded processing capacity, optimized resource utilization, and reduced processing costs.

### Leveraging New Technologies and Platforms

A number of new and emerging technologies, such as internet, mobile, social media, location-based solutions, and cloud-based solutions are driving insurers to leverage these options and offer an enhanced customer experience. Non-life insurers are launching self-service internet portals and mobile-based applications for claims. Insurers are also empowering their claims adjusters and investigators with mobile-based solutions for anytime/anywhere connectivity. Moreover an increasing number of insurers are utilizing social media data during claims investigations.

## 4.3. Implications

Insurers need to reassess their current claims transformation initiatives and focus on building an integrated system. While many prior initiatives have been focused largely on automation, insurers need to leverage new technologies and tools, such as mobile, analytics, and social media. It stands to reason then, that their core claims processing system should offer these capabilities.

If an insurer wants to implement any vendor-supplied new claims management solution, they should assess its current features and support for analytics, self-service features, and newer technologies. They should also analyze the future roadmap of these claims solutions to confirm that implementation will meet the insurer's business objectives.



# 5. Trend 2: Adoption of Advanced Analytics and Predictive Modeling

A recent P&C survey states that 85% of respondents (69 P&C insurers in United States and Canada) said that they use or are planning to use predictive modeling.<sup>7</sup>

## 5.1. Background and Key Drivers

Fraud is a major component of claims expenses. The Insurance Information Institute estimates that property/casualty fraud costs more than \$30 billion a year from 2006 to 2010. In an effort to improve fraud detection, insurers are striving to detect fraud early on in the claims process.

Specifically, insurers are looking to identify, claims with a high probability of significant loss or additional future loss. An early recognition of complex and high-risk cases will also allow insurers to allocate these cases with highly skilled claims adjusters. A prediction on the likely outcome for a claims case may help insurers manage the claims cycle in a more efficient manner, while reducing costs.

## 5.2. Analysis

Predictive modeling involve analyzing historical and current data by using a mathematical model that predicts the likelihood of future outcomes. According to a Gartner study, the adoption of predictive modeling has significantly increased among insurers during 2011 and 2012. However the adoption has been mostly for large insurance companies and those with strong statistical/modeling skills.<sup>6</sup>

A recent P&C survey states that 85% of respondents (69 P&C insurers in United States and Canada) said that they use or are planning to use predictive modeling.<sup>7</sup> While a large number of non-life insurers are already utilizing predictive modeling for underwriting and sales, there is an increased focus on utilizing this capability in claims.

Defining an objective or question is the first step toward building a predictive model. As predictive modeling involves extensive data analysis, insurers need to identify relevant data sources and gather data. The sources should include historical data with the insurer and data related to the current claims case. The data points include claims attributes, information about the claimant, geographic conditions, time-related data, and third-party data, such as that from auto repair shops.

### Exhibit 4: Predictive Modeling Process



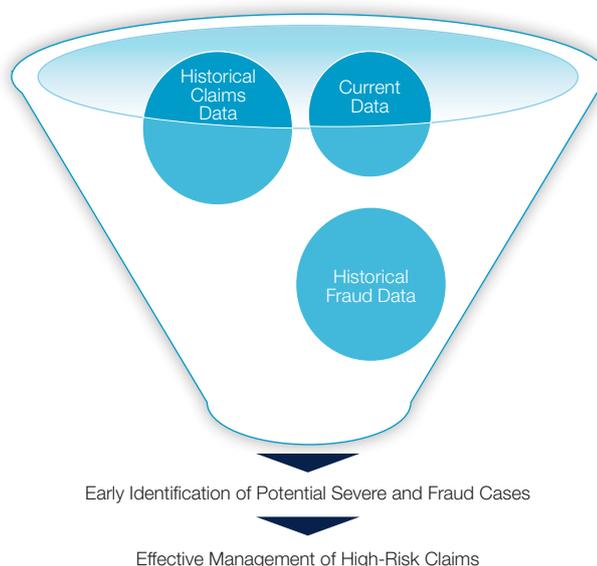
Source: Capgemini Analysis, 2012

6 Gartner, Inc., "Hype Cycle for P&C Insurance, 2012," Kimberly Harris-Ferrante, 27 July 2012

7 *Predictive Modeling Emerges as Competitive Differentiator in P&C*, Insurance & Technology, <http://www.insurancetech.com/business-intelligence/predictive-modeling-emerges-as-competiti/232600405>

While analyzing data, data mining can lead to identifying relationships among elements in a database. It can also identify common characteristics of fraudulent claims, which can be used to build a scoring model for claims cases and detect potential candidates for more detailed examination. Finally, the model specifies the impact of different characteristics of a claims case, based on the final payout value and probability of fraud. Predictive modeling helps identify fraud cases with high-loss potential by determining the payout amount and fraudulent activity and detecting specific characteristics. This identification allows the insurer to manage claims in a more effective manner by assigning a more skilled adjustor, and ensuring more focused tracking and detailed fraud investigation. Apart from this, predictive modeling also can be leveraged for subrogation and recovery.

## Exhibit 5: Benefits of Predictive Modeling



Source: Capgemini Analysis, 2012

Thus, non-life insurers can achieve dual benefits—improving customer satisfaction by quick/accurate settlement, and reducing costs by effectively managing the claims the cycle and enhanced fraud detection.

### 5.3. Implications

As insurers develop predictive modeling capabilities, they would be prudent to research prebuild modeling solutions with basic capabilities. By leveraging data warehousing and mining platforms, these types of advanced analytics applications are typically built on top of the core claims platform. Once the platform is built, insurers can always enhance and customize them to suit their evolving needs.

In order to gain efficiency, insurers should consider building data warehousing with consolidated historical data, which may, in some cases, require cleansing to remove redundant or invalid information. Another prudent move would be to consider analyzing and establishing connections with information sources from governmental, third-party, or pay-for-use data providers.

Extensive use of predictive modeling will allow non-life insurers to look into specific areas of the claims process to identify reasons for claims leakage. This analysis can help insurers plug the leakage and eventually reduce claims.

# 6. Trend 3: Use of Social Data to Detect Fraud

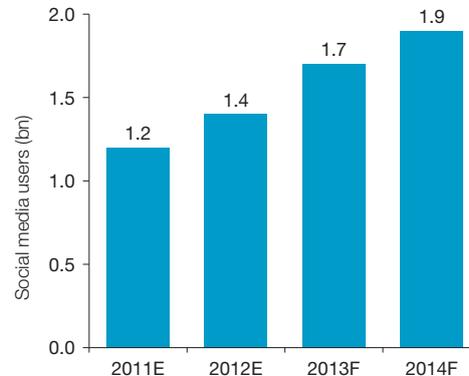
## 6.1. Background and Key Drivers

While the non-life insurance industry seeks newer ways to increase business and control costs, claims fraud remains a key concern. Although the issue of claims fraud is as old as the industry, itself, the cost is expected to increase over time.

It is generally believed that fraud costs about 10% of the P&C insurance industry's incurred losses and loss adjustment expenses each year.<sup>8</sup> A 2012 Insurance Networking News survey conducted in the United States,<sup>9</sup> found that 32% of P&C insurers considered that fraud cost more than 20% of total claims expenditures. Moreover, 54% of respondents indicated they expected fraud costs to rise in 2012 when compared to 2011, while only 3% expected a decline.

As the number of social media users continues to accelerate, insurers are eager to leverage the vast amount of information generated on social platforms. According to eMarketer.com,<sup>10</sup> the number of social media users (identified as those who use social networking sites at least once a month) is likely to grow at a CAGR of 15%, reaching close to 1.9 billion by 2014. The region with the highest number of social network users is Asia-Pacific, where 853.1 million internet users are expected to log on to social sites by 2014.

Exhibit 6: Global Social Media Users (bn), 2011–14F



Source: eMarketer, 2012

## 6.2. Analysis

With the growing use of social media, people are increasingly making their day-to-day activities public on social media platforms, particularly Facebook and Twitter. With an intense focus on controlling claims fraud, insurers have started to utilize claimant's information available on social media.

Claims investigators are visiting the social profiles to collect information about the claimant and the incident. Personal and social information, such as current health condition, family relationships, and posts/photos of daily/social activities help

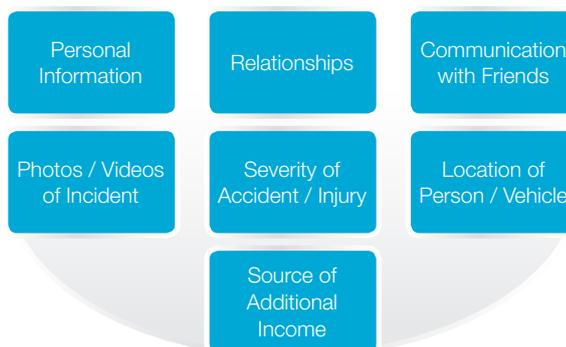
<sup>8</sup> *Insurance Fraud*, Insurance Information Institute, [http://www.iii.org/issues\\_updates/insurance-fraud.html/](http://www.iii.org/issues_updates/insurance-fraud.html/)

<sup>9</sup> *Uptick Seen in Insurance Fraud Costs*, Insurance Networking News, <http://www.insurancenetworking.com/news/fraud-pcciaa-fico-predictive-analytics-passmore-schreiber-31138-1.html>

<sup>10</sup> *Where in the World Are the Hottest Social Networking Countries?* eMarketer, <http://www.emarketer.com/Article.aspx?id=1008870&amp%3BR=1008870&R=1008870#4RMI5KuriDUrr5GJ.99>

determine the validity and/or severity of claims. For example, photos/videos of a person on social networks can indicate the severity of bodily injury in an accident to help determine if the claims are legitimate.

## Exhibit 7: Possible Social Data Points for Claims Adjustors and Investigators



Source: eMarketer, 2012

There also may be additional incident-related information available, such as photos/videos, location of claimant/vehicle at time of incident, and relationship with other parties involved. Suppose, for example, an insurer discovers that two people involved in a car accident are friends on a social media platform, such as Facebook. This may indicate that the accident may have been staged, and will need further investigation. In one such instance, a policyholder filed a claim for a stolen GPS. During the investigation, the claims staff uncovered that the policyholder had, in fact, listed that GPS for sale on Craigslist.<sup>11</sup> Any uploaded video by a third party on YouTube, for example, can provide useful information on a fire incident.

The availability of information varies for different cases, based on social media usage by claimant, privacy settings, and posted data on incident. Also, there is no standard set of rules pertaining to legal and ethical ways of accessing a claimant's social media information. Thus, available information on social media needs to be augmented by additional investigation and proof.

### 6.3. Implications

Currently, a number of P&C insurers are conducting a manual investigation of social data after a claims request is received. However, they should look to develop an automated analysis capability using data mining, business intelligence, and analytics.

Advanced technologies, such as face detection, will allow accurate profile identification, while social network analysis will result in identifying relationships. For example, social data can be collected and associated with customer data in CRM, thus resulting in faster and more pro-active fraud detection.

Integration of social data with existing core systems will help utilize the full potential of social media analysis offering optimal analytic capabilities.

<sup>11</sup> *Using Social Media in Claims Investigations*, Claims Journal, <http://www.claimsjournal.com/news/national/2012/11/05/216789.htm>



# References

1. "Insurers Push Boundaries of Social Media Use in Claims," Underwriting, Insurance & Technology, <http://www.insurancetech.com/policy-administration/insurers-push-boundaries-of-social-media/231902292>
2. "Predictive Modeling Emerges as Competitive Differentiator in P&C," Insurance & Technology, <http://www.insurancetech.com/business-intelligence/predictive-modeling-emerges-as-competiti/232600405>
3. "Social Media Sleuthing," Property Casualty 360, <http://www.propertycasualty360.com/2012/01/27/social-media-sleuthing>
4. "Uptick Seen in Insurance Fraud Costs," Insurance Networking News, <http://www.insurancenetworking.com/news/fraud-pcciaa-fico-predictive-analytics-passmore-schreiber-31138-1.html>
5. "Using Social Media in Claims Investigations," Claims Journal, <http://www.claimsjournal.com/news/national/2012/11/05/216789.htm>
6. "Where in the World Are the Hottest Social Networking Countries?" eMarketer. <http://www.emarketer.com/Article.aspx?id=1008870&amp%3BR=1008870&R=1008870#4RMI5KuriDUrr5GJ.99>
7. Celent Research, "Emerging Insurance Technologies," December 2011
8. Celent Research, "The Reality and Opportunities in Claims Management," June 2012
9. Celent Research, "Using Social Data in Claims and Underwriting," October 2011
10. Gartner, Inc., "Hype Cycle for P&C Insurance, 2012," Kimberly Harris-Ferrante, 27 July 2012
11. Gartner, Inc., "Insurers Must Become More Aggressive at Addressing Underwriting and Claims Fraud," Kimberly Harris-Ferrante, 17 June 2011
12. Gartner, Inc., "North American P&C Insurers: Shifting Focus to Customer Retention, Core Systems Replacement and Technology Evolution," Kimberly Harris-Ferrante, 13 March 2012
13. Gartner, Inc., "Top 10 Technologies With the Greatest Impact for the Property and Casualty Insurance Industry," Kimberly Harris-Ferrante, 2 March 2012
14. Swiss Re Sigma Reports, Swiss Re, Published annually. Also available at <http://www.swissre.com/sigma/>
15. The Global Outlook in Summary, 2010-2014, World Bank, <http://web.worldbank.org/external/default/main?theSitePK=659149&pagePK=2470434&contentMDK=20370107&menuPK=659160&piPK=2470429>

The *What You Need to Know* series from Capgemini Financial Services is written by our Strategic Analysis Group and provides trends, research, and analysis on key topics for financial services firms.

*What You Need to Know: Non-Life Insurance* looks at emerging trends in the non-life insurance industry across three areas of the insurance lifecycle: front office, policy administration and claims processing and payout. The papers include analysis, implications and leading practices. The latest publications in this series are available at [www.capgemini.com/insurance](http://www.capgemini.com/insurance).

### About the Author

**Amit Jain** is a senior consultant in Capgemini's Strategic Analysis Group within the Global Financial Services Market Intelligence team. He has more than five years of experience in strategy, business, and technology consulting for financial services clients across insurance, banking, and capital markets.

We would also like to thank **Chirag Thakral, Sree Rama Edara, David Wilson,** and **William Sullivan** for their overall contribution to this publication.



## About Capgemini

With around 125,000 people in 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2012 global revenues of EUR 10.3 billion.

Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want.

A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Learn more about us at

**[www.capgemini.com](http://www.capgemini.com)**

For more information, contact us at: **[insurance@capgemini.com](mailto:insurance@capgemini.com)**  
or visit: **[www.capgemini.com/insurance](http://www.capgemini.com/insurance)**

The information contained in this document is proprietary. ©2013 Capgemini. All rights reserved.  
Rightshore® is a trademark belonging to Capgemini.