



# Data Analytics Verticals

## Insurance

In recent years, data and analytics have become essential tools for insurers in designing more sophisticated approaches across all aspects of their operations. With an incredible amount of data flowing in from multiple new digital channels, the insurance industry is undergoing a paradigm shift in the way they function – right from product planning to pricing, introduction, marketing, customer self-service and claim processing.

Here are some key business imperatives and trends that insurers must consider to transform into a digital insurer powered by data and analytics:

- Improved underwriting profitability
- Better intelligence on customer and underwriting trends
- Personalized products and offerings
- Advanced risk management enabled by analytics
- Maximized returns from investments that are impacted by low interest regime, control / prevent fraudulent claims
- Faster claims processing leading to improved customer satisfaction
- Real-time or near real-time analysis for responding to new business
- Insight-driven decision making enabled by drill-down information on product, producer and customer profitability

## Infosys point of view

The Insurance industry is immensely data intensive. Historically, their data has been largely fragmented and underutilized. With advances in technology, insurance carriers are now able to tap into different types of data – machine data from servers, social data from Facebook and Twitter, clickstream data from websites, voice logs from call centers, communication data from e-mails, digital images from drones, data from telematics, data generated from sensors and IoT, public data (e.g. government regulations and litigation related information) and more. Combining structured and unstructured data is

enabling them to generate powerful insights to drive business decisions. Insights generated through data analytics is helping them drive strategic initiatives to increase operational efficiency, enhance customer intimacy and develop new revenue models. Carriers are now rapidly transforming into “analytics-driven digital enterprises” with data collection and analysis underpinning their business strategy and day-to-day decision-making.

Our data analytics service offerings empower insurers to monetize data from across the organization, eliminating data and application boundaries and silos. This helps fully leverage the power of analytics to drive competitive advantage and business benefits.

- **Boundaryless information**

Boundaryless information platform breaks data, process and technology boundaries to make the right information available to the right users at the right time.

- **Core data systems modernization and data infrastructure** – Creating a boundaryless information platform leveraging data lakes, data grids and master data solutions supported by a strong data governance framework creates a seamless data layer. This enables insurance organizations to combine structured and unstructured data to generate powerful business insights through analytics solutions and visualization.
- **Enhanced use of big data for underwriting** – Exploit the power of big data to understand performance levels, claim history, risks and trends in underwriting process to improve underwriting precision.
- **Improved underwriting profitability** – Develop new risk models blending best-in-class actuarial data with medical science, demographic trends and government data. This gives underwriters insight into new and emerging risks that are underinsured such as cybersecurity and business interruptions from natural disasters.

- **Analytics**

- **Predictive and prescriptive analytics** – Data science-driven predictive and prescriptive analytics helps insurers to differentiate from competition on pricing strategies. It also helps them deal with inaccurate claims assessments and design refined models built on comprehensive data sets and parameters. It helps in offering the right premium for the right risk, helping retain profitable customers.
- **Advanced customer analytics** – Identify new growth opportunities by better anticipating customer needs and interests. Understand customer risk profile and offer tailored products. Increase cross-sell opportunities and help retain customer for longer periods. Social media data provides deeper insights about customers which was never available, leading to better lifestyle analysis, personalizing products and pricing models all of which lead to business growth.
- **New pricing models and risk-based pricing models** – Roll-out discounts and offers analyzing data on driving habits leveraging Telematics. Insurers are able to build new offerings (pay-as-you-drive) and improve their profitability (charge higher for riskier products).
- **Fraud detection and enhanced risk management** – Early fraudulent detection through exploratory data analysis, claims trend analysis, pattern analysis on comprehensive datasets, text analytics, social analytics, real-time analytics and predictive analytics helps improve the fraud detection process, helping prevent claims payouts. Analytics on claims and fraud transactions helps enhance risk management and underwriting process.

- **Faster claim processing** – By facilitating more accurate estimates of the ultimate value of a claim and identifying claims with the highest propensity for litigation leveraging analytics and predictive models such as actuarial modeling, product profitability models, stochastic modeling, customer profitability models and propensity modelling.
- **Producer analytics** – Distribution optimization, lead development, cross-sell, agent performance analysis, agent compensation and workload optimization to analyze agency sales performance and drive revenue growth.

## Success Stories





Implemented a **new data foundation architecture and information delivery platform** for agent pay and sales performance reporting and analytics as part of a major business-driven transformation engagement for a US insurance giant. Implementation of master data management was a key component of the solution. A major simplification and modernization initiative with persona-based reporting and analytics solution was delivered on multiple delivery channels (desktop, web and mobile).



Developed a **teen safety and driving behavior analysis solution** to promote and inculcate safe driving amongst teenagers for a leading auto insurer in North America. Real-time alarms and notification alerts in case of emergency or non-compliance was a key value add for drivers using the solution. We designed the end-to-end architecture and solution leveraging two IP assets (location-based services and enterprise gamification) which helped in quicker implementation at reduced cost. The solution also included components such as mobility, rackspace cloud hosting, streaming data processing, real-time analytics, and integration services. The solution helped the client in creating a new revenue model and aided customer intimacy.




Implemented an **analytics solution for mining watershed events** with adverse impact to the business in specific geographic locations throughout the US and identifying sales opportunities for a leading US-based insurance carrier. Architected and implemented the end-to-end pilot solution including data ingestion, cleansing, extraction, analytics and visualization. Watershed events were extracted from multiple data sources – paid, internal and public. Developed interactive heat map-based UI driven by overall business context and goals to enhance end-user experience, engagement and effectiveness of the solution. Targeted selling to business owners based on insight generated from the solution helped in  revenue growth and agent productivity. May I help you? 





Implemented **data science driven predictive and prescriptive analytics solutions** for key insurance clients.


- **Pattern analysis and predictive modeling** for claims triage, analytics and fraud detection for a major player in the insurance industry.
- **Predictive, analytical models** to identify cross-selling opportunities for a wide-range of products from term-life customers to whole-life products with attributes influencing conversion for an Insurance major.
- **Cross-sell churn predictive model** to take corrective action, run targeted loyalty programs and predict financial commissions for an insurance major.

**Trending @ Infosys**

(https://www.twitter.com)  
(https://twitter.cx/status/770943331677286400)

(https://www.twitter.com)  
(https://twitter.cx/status/770833206987730944)

(https://www.twitter.com)  
(https://twitter.cx/status/770675147787341825)

(https://www.twitter.com)  
(https://twitter.cx/status/770652763193806848)

(https://v  
(https://t7486095

“RT  
(https://twitter.com/x/stat  
us/770943331677286400  
 )@panaya  
(https://twitter.com/panay  
a): Attending  
(https://twitter.com/x/stat  
us/770943331677286400  
 )#OOW16  
(https://twitter.com/hashta

“RT  
(https://twitter.com/x/stat  
us/770833206987730944  
 )@ATPWorldTour  
(https://twitter.com/ATPW  
orldTour):.  
(https://twitter.com/x/stat  
us/770833206987730944  
 )@Infosys  
(https://twitter.com/Infosy

“Schedule a meeting with  
our experts at  
(https://twitter.com/x/stat  
us/770675147787341825  
 )#OOW16  
(https://twitter.com/hashta  
g/OOW16) now!  
infy.com/2byjc4R  
(https://twitter.com/x/stat  
us/770675147787341825

“Meet us at Booth E-60 at  
(https://twitter.com/x/stat  
us/770652763193806848  
 )#Sibos  
(https://twitter.com/hashta  
g/Sibos) to know more  
about our industry-leading  
(https://twitter.com/x/stat  
us/770652763193806848  
 )#commerce

(http  
us/7.  
(http  
g/(  
(http  
us/7.



May I help you?



More Posts

 Contact Us

 Locate Us

About

Overview

Blogs

For Press

For Investors

For Jobseekers

### **Subsidiaries**

EdgeVerve Systems

Infosys BPO

Infosys Consulting

Infosys Public Services

Skava Systems

### **Programs**

Infosys Foundation

Infosys Foundation USA

Infosys Science Foundation

Infosys Leadership Institute

Sustainability

### **Social**

Twitter

Facebook

LinkedIn

YouTube

[Terms of Use](#)

[Privacy Statement](#)

[Safe Harbor Provision](#)

[Trademarks](#)

[Site Map](#)

Copyright © 2016 Infosys Limited