

# INSURANCE INNOVATION

TECHONOLGY IDEAS AND  
EXPERIENCES FOR THE  
INSURACE MARKET

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IoT & Biometrics  
Know your Customer  
Automated Claims  
Evolving products

**QUALITY OF SERVICE**

**ROBOTIZATION**



Decision Support  
Subscription process  
Drones & Wearables  
Business Rules

**COST EFFICIENCY**

New markets & products  
Return of Investment  
Fraud detection

**PERFORMANCE**

Process Automation  
Expert Systems  
Metrics & Analytics  
Real time Dashboards



real world ideas, solutions  
and experiences for insurance

**INSURANCE TECHNOLOGY  
INNOVATION**



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## INTRODUCTION

The IT professionals at Delonia Software have been developing innovative solutions for the insurance sector since 2001, when we built the Placement System for Marsh McLennan, the top insurance broker in the world. Marsh needed an innovative system for modernizing their corporate risks underwriting business, so the Placement System developed by Delonia spurred business growth and was soon deployed across Europe; it enabled cross border placements among different countries, sophisticated data analytics and the development of a number of new services for Marsh's clients, all thanks to the top-level software architecture and deep domain knowledge provided by our team.

Today we continue to bring to the table new ideas and solutions for our clients in the insurance industry and related verticals. Our profile as a tech company with a highly talented team, extensive cross-sectorial experience (Banking & Financial services, Healthcare & Pharma, Telecom, among others) and our hands-on involvement in different startups allows us to offer our clients tailor-made, highly innovative tech services, always focused on their business results and process optimization.



In this document we have put together some examples of what we at Delonia are doing for our clients, as well as for ourselves, through our own in-house projects and solutions. In the area of Insurance, we view technological innovation both from the point of view of the end-user (especially in the case of individual insurance protection) and internal corporate processes, for which the management and use of information is more and more relevant in terms of the creation of new products & services, process optimization & competitiveness, and ROI in rapidly growing and changing global markets.

Whether it be to explore new opportunities or to be well positioned & protected against new competitive threats, technology today plays a key role in the ongoing profitability and competitiveness of companies in all sectors—and the insurance business is no exception. In Delonia we are seasoned experts in technology; we innovate on a daily basis and have deep domain knowledge of insurance and its various components. The following are some projects and ideas that we would like to present to you.

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## The Internet of Things (IoT) and Biometrics

15 years ago we used control agents and monitorization in hydro-electric generating plants to supervise and control their risks; today, the same approach has been followed with hundreds of thousands of always-on devices that have communications & signalling processes installed in them; now, this is known as the “Internet of Things”.

Many of the most important of today’s “IoT” applications for insurance have been focused on obtaining biometric data from patients under medical care in order to provide improved healthcare & monitoring services (for example, real-time patient information to doctors). Delonia has taken part in a number of different projects initiated by pharmaceutical, telecom and insurance companies during which we have integrated various sorts of devices (smart phones, etc.) into telecom and IT networks. This has made it possible to supervise in real-time the state of patients’ health, improving their well-being, quality of life and degree of autonomy.

For the insurance sector, Delonia is able to provide special value in the area of monitoring individual and corporate risks that are currently insured.

From the behaviour of drivers covered by “Pay as You Drive” policies to risk-mitigation of assets monitored by insurers (warehouses protected against break ins & theft or meteorological sensors for agricultural & crop insurance, etc.) our ability to use large volumes of risk-exposure information enables our clients to obtain value by being able to model new products and services.

The Delonia team has carried out successful projects involving the implementation & management of smart/intelligent devices for insurance and healthcare for Roche (remote monitoring of diabetes patients and those undergoing anti-coagulation treatment), Telefonica/O2 (monitoring chronic patients via mobile apps) and Nokia, among others.



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## Location Based Services (LBS)

The ability to locate a mobile device and identify its owner so as to be able to send him or her personalized information and sales-offers is a very powerful tool for sales and marketing. Location based services of this sort are becoming easier to implement, since more mobiles & smart phones use the various technologies that support business strategies based on location services.

One of our LBS initiatives is to use different technologies (Beacons, Wi-Fi, Roaming, etc.) to detect when individuals and/or goods enter a high-risk zone, at which time publicity for new consumer products or offers for micro-insurance are sent to the owner of the mobile device. Thanks to our deep ongoing ties with telecom service providers and captive insurance providers, we have applied these tech solutions in different projects.

Intelligent devices (IoT as mentioned earlier) add value to these types of solutions by making possible advanced solutions for insurance policyholders. For example, proactive management for delivering medical assistance, road-side assistance for drivers, fleet management (autos or marine) or risk prevention/mitigation.

## The Insurance of Things

Smartphones, smart watches, tablets and many other devices have become increasingly valuable to their owners, who, in many cases, depend on them, just as much as they do on their cars. The fact that there is an increasing number of valuable such mobile assets create the need to insure them against loss, theft, malfunction or breakage. Innovation in insurance companies' technical areas and in their departments of production, claims and marketing enables them to create and define new products oriented to these new markets.



Insuring millions of mobile devices is no easy task when you take into account the need to manage so many additional claims and coverages; the same is true with respect to the imminent arrival of driverless cars, domotic robots or high-value wearable's. Delonia has taken part in initiatives for

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creating new insurance and micro-insurance products to cover smartphones, pets or even trees, or self-covered assets in case of captive insurance companies: in each of these cases the conditions and technological requirements are very different.

Technology should serve the current and the future needs of businesses so that they can maximize their potential by making optimal use of resources. At Delonia, this has long been our belief and is the basis of the strategies we place at the disposal of our clients.

We have also designed expert systems to evaluate data, rules and patterns in large data bases (“Big Data”), identifying real-time incidents and reducing processing times for management of corporate claims or taxes in company bills or banking transactions for electronic payments.



## Fraud Detection

Given the rising volumes of information that are being generated and captured by IT systems that provide business support, there is now a real opportunity in the area of analysis, detection and measurement of fraud.

Loss/claims management is an area where Delonia has provided diverse solutions to its clients, all with a view to enhancing their flexibility, adaptability and analytical ability. For example, in one case of health claims (reimbursement of healthcare expenses), we created rules to identify patterns associated with fraud or recording errors, reducing significantly the rate of such incidences in the day-to-day provision of these services.

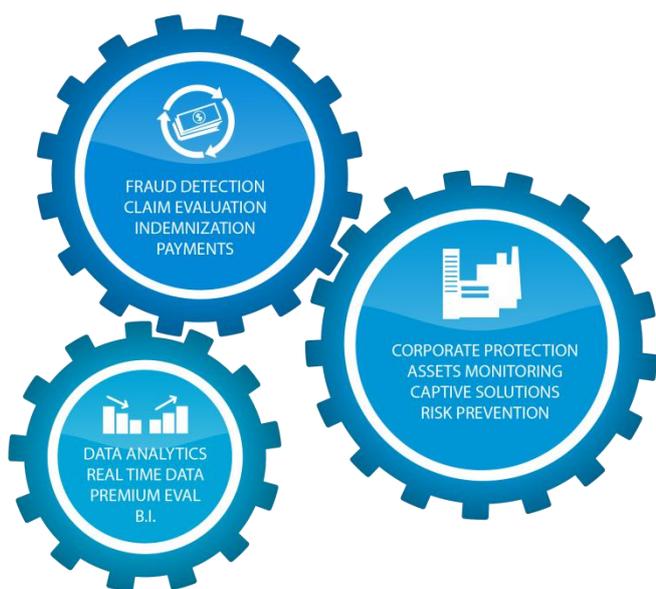
While working to identify fraud patterns, we usually come across new rules and conditions which can be reused to develop new sales opportunities in the areas of acquisition and retention of customers, new value-added services or relational marketing processes, among others.

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## Automating Processes - Claims

By developing end-to-end claims management solutions for brokers, insurers and reinsurers, we at Delonia have acquired domain competency and deep knowledge of the nuances of the business processes associated with the different kinds of players, as well as with the different categories of businesses and types of products.

There are always opportunities for further automation to reduce managers' workloads, cut costs and improve efficiency & productivity and the capacity of the business to provide better quality service to the current insured clients.



Our solutions are designed to seek a fine balance between total automation and digital consulting (e-Advice) so that:

- Tasks that do not need human intervention are automated. Examples are: the sending of notifications; calculating validation rules, quantifying amounts in "retrocession", generating documents and spread sheets.
- Tasks that require decision-making will have tools and solutions that support such decision-making: rules derived from earlier decisions or from a set of pre-configured decisions; manuals and/or guides and decision-data analytics.
- Business Knowledge will be easy to distribute among individuals (employees, staff, managers, etc.) or to store in the IT system.

Our solutions have used a number of different techniques, such as Business Process Management (BPM), expert systems, data capture and validation, automatic online declarations from monitoring appliances, and many others.

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## Expert Systems

The figure of the expert is of central importance in the process of underwriting as well as in the evaluation of losses/damages. This is a high cost function - not only in monetary terms but also in terms of management time, since frequently a bottleneck is created when this single expert is swamped under a sudden overload of underwriting work and claims that occur all at once.

The now-fashionable "robotization" of experts is nothing more than a substitution of one person (loss assessor, adjustor, underwriter, medical evaluator) by an automaton, which may be an algorithm or an IT system that is capable of taking such decisions.

In practice, technologies like drones and reconnaissance systems are substituting for human functions. This is not just because of cost or time savings, but also due to the better quality of service and reduction of errors that these enable. A highly visual example is the use of drones to identify and count the containers being loaded onboard vessels as a part of the underwriting and loss assessment / adjustment services in marine insurance products.

Mobile-based loss assessment, which enables a part of the work to actually be done by the insured person, has been around now for a while. Another established practice is the substitution of the medical expert responsible for risk assessment in life/health insurance.

Logically these robots will never completely replace humans, and will only take over those tasks for which no human intervention is required. In the case of medical evaluations, more than 50% of the applications can be processed automatically with significant cost savings and an additional benefit, which is the possibility that the human experts can turn to functions where they add real value to the business and their clients.

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## Data Analytics – from Systems to the Board

How much time is spent monthly, in every department of a company, generating reports and lists to meet management needs?

It is also in these areas of reporting and analysis where technological innovation can provide great value in terms of time savings and improvement in data quality, which in turn means better support for corporate or company decision making. Creating better reports with better information quality in less time: that's what our solutions for decision support analytics offer.

From dashboards to real time information consoles, we at Delonia have been providing solutions for BI, Big Data and Data Analytics for years. Together with document rendering and automation, our client companies can save time and effort while producing high quality documentation and data processes.

The use of dedicated data bases for processing information (Big Data) makes it possible to automate the transformation of data, apply control rules and generate a large part of the analytical documentation required by corporate management.

Delonia designs, develops and deploys these systems for data analytics, enabling publication platforms, multi-channel clients (online, apps, tablets, and email) and systems integration, bringing real time business data to Management directly from the operational Systems.



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## DELONIA INSURANCE SOLUTIONS

Our wide range of solutions for the Insurance Industry reaches every business area and activity. We have been providing IT solutions and services to Insurers, Reinsurers, Captives and Brokers: some of these solutions are presented here.

<b>INSURERS</b> Policy Subscription Online quoting Health Claims Claims Management ESB Integrations	<b>REINSURERS</b> Technical Area Reinsurance Claims Programs Accounting IBNR	<b>BROKERS</b> Placement Claims Management Policy Management Content Managem. B2B Integrations
<b>INSURED</b> Claims Management Assets Coverage Online Dashboards Analytics Digital Policy	<b>CORPORATE</b> Risk Management Insurance Costs Mitigation Actions Captive Solutions Employee Benefits	<b>HORIZONTAL</b> Mobility Solutions Solvency II QRTs, Reporting Social Media BPM

Delonia offers its talented and experienced team, international project management, software development capabilities and solutions delivery and integration. From requirements analysis to system integration, tailor-made software platforms and customized industry-specific solutions, Delonia is your IT provider insurance.

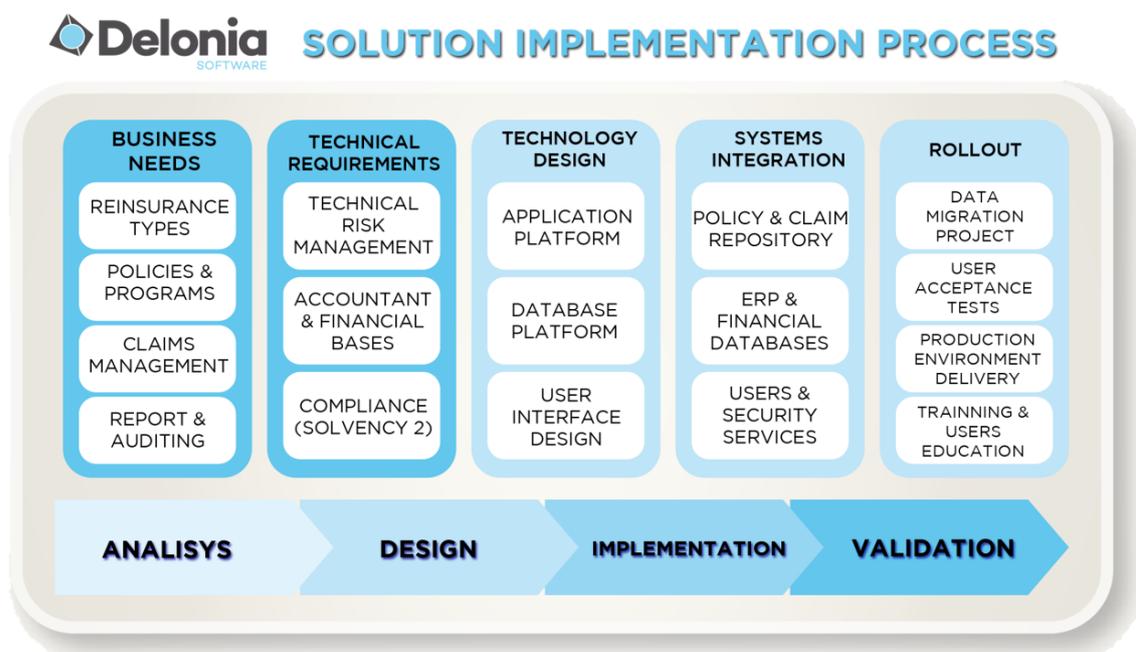


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## HOW DO WE WORK?

Delonia Software offers a team of professionals with international experience and specific knowledge of Insurance and Reinsurance industry.

We approach every project differently, analysing the business and technical requirements, designing the solutions and integrations needed and planning the implementation and validation of the systems as part of the rollout of the resulting systems.



Quality is a priority for Delonia, as we apply strict standards to each and every phase of the projects we participate in. Documented quality plan and test plan is generated to align user validation with IT deliverables, and integration and security tests are performed as part of our methodology.

Our understanding of your needs and requirements is the base of our capacity to successfully deliver the solution you are looking for.

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