

The
Convergence
of **Technology**
and **Data** in the
Insurance
Domain

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This is the first in a series of White Papers covering further topics including

- Optimizing Performance Management through Technology
- Lead Management: Quality vs Quantity
- Distribution Transformation: Creating Choice and Scalability

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The Convergence of Technology and Data in the Insurance Domain

INTRODUCTION

In the last decade we have seen a significant increase in marketing reach, with social media, mobile devices, increased internet usage and a new generation of consumers expecting salient, targeted marketing for products they want. As a carrier, tapping into this potential is essential for not only growing premium, but ensuring growth is of sufficiently high quality to satisfy the needs of the corporation.

Achieving high quality growth without using the best technology is an insurmountable task. Your collective books of business and external customer databases contain trillions of records. Matching customer data requires powerful algorithms based upon rules tailored to your actuarial, financial and marketing needs. The tidal wave of the connected world – Internet of Things, Big Data – is bringing a potential treasure chest of information that may turn out to be a Pandora's box for those unprepared for it.

An effective enterprise technology platform must be utilized to link corporate, field and agency income producing activities in a coordinated manner to overcome competitive forces and maximize returns.

In this, the information age, when consumers identify a product they want, they want it immediately; the first company to provide them with an attractive solution to their needs is in the best position to win their business. Judicious use of technology is key to an integrated enterprise approach to targeted customer acquisition and retention. The integration between not only legacy systems, but systems spread across internal divisions, is essential for pinpointing the target customers that will create the greatest lifetime value.

Action-oriented data should form the heart of any enterprise technology platform. This data coupled with a business workflow-oriented front end that gives users a frictionless route to executing best practices and targeted income producing activities.

UNSTRUCTURED DATA
WILL ACCOUNT FOR
MORE **THAN 80%** OF
THE DATA COLLECTED
BY ORGANIZATIONS

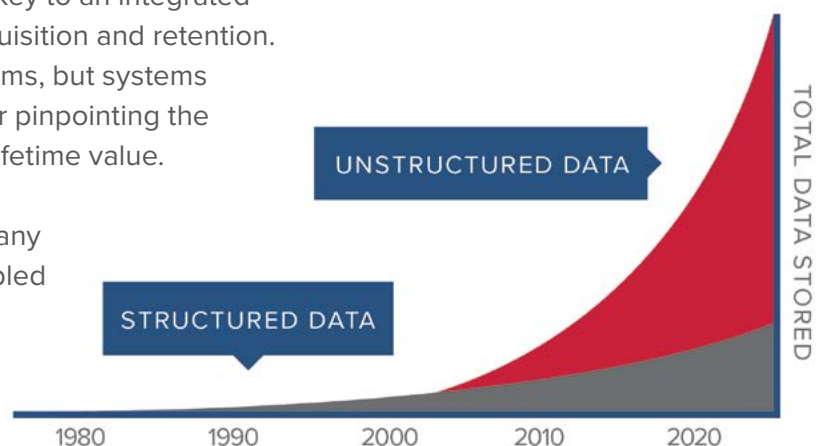


Figure 1. Human-Computer Interaction & Knowledge Discovery in Complex Unstructured, Big Data. 2014, MAPR Technologies

TECHNOLOGY CHALLENGES

When forming a product strategy, it is wise to clearly identify the customer and as many characteristics as possible. The massive quantity of data available from connected devices, the general increase in volume of standard systems data and the ‘Big Data Fog’ creeping over the horizon should cause alarm bells to ring in every large enterprise. The modern insurance carrier must avoid the many traps of simple correlation when dealing with massive volumes of structured and unstructured data.

Taming the flood of data, coming up with a measured approach to modeling and analytics and then tying this directly into actionable sales and marketing behaviors will allow the top performing companies to truly understand the market. Those who do not will be left floundering and struggling with systems and methodologies creaking under the heavy weight of this new glut of information.

The role of Artificial Intelligence is increasing. The use of Genetic Algorithms and Artificial Neural Networks is now ubiquitous. Combinations of these well-known technologies along with more modern approaches such as Deep Learning will allow insurance companies not only to mine the Big Data landscape, but to create behavioral models. These will be able to predict customer behavior using a combination of the newly available data.

Let’s take Use Based Insurance as a starting point. The connected vehicle is one of the poster children for UBI. The proliferation of wireless transmission technologies has allowed the simple OBD-II vehicle interface to be exploited for the capture of customers’ driving behavior. Various strategies are being employed on the back of this data such as ‘pay-as-you-drive’ and ‘pay-how-you-drive’ ^{1(Chen, N)}.

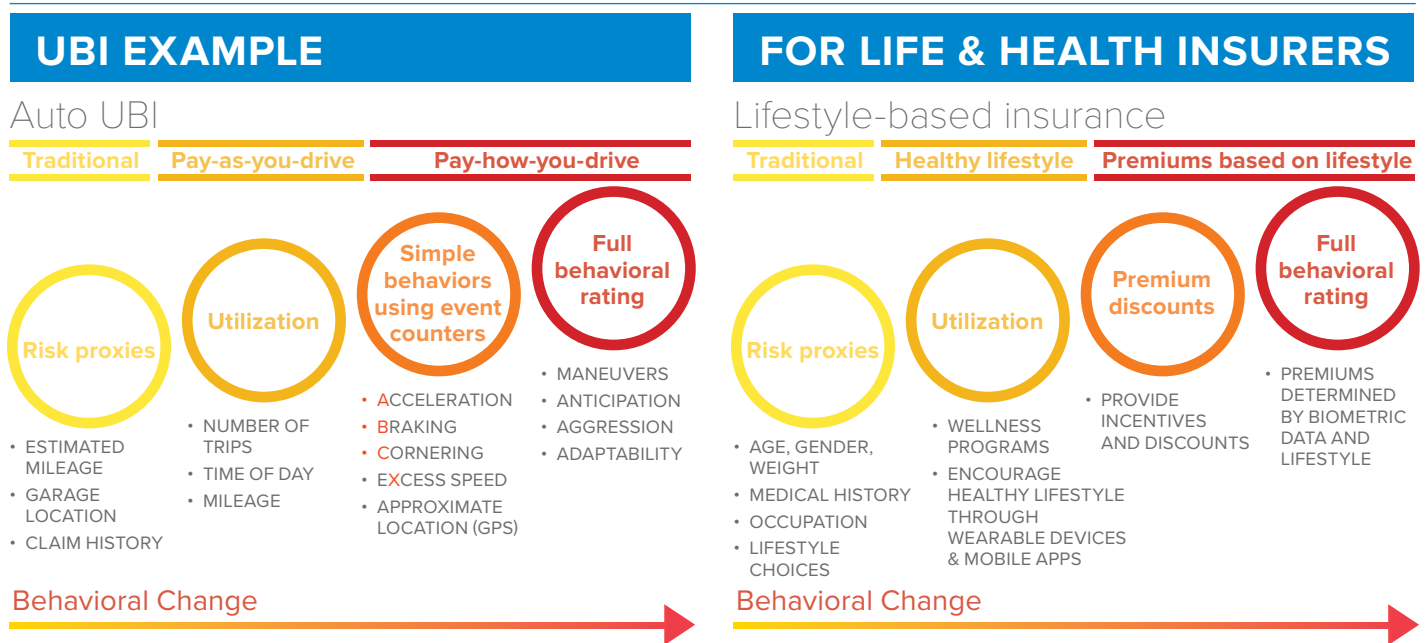


Figure 2 - UBI Example. Source: towerswatson.com

Extrapolating this to other aspects of a customer’s life leads to fascinating opportunities for modeling customer behavior and ‘pay-as-you-live’ scenarios. We will ultimately create AI customer models that can define someone’s risk profile so accurately their insurance costs can be adjusted on a real-time basis.

These more accurate models will allow unprecedented accuracy in the alignment of customer-centric needs with corporate product mix, performance and combined ratio.

Technology partners not cognizant of these waves of innovation, and without a coherent plan to address them, shows a lack of foresight that will surely lead to exabytes of data slowly grinding your systems to a halt.

LAYING OUT A STRATEGY

Making sense of data brings us to the specific strategies employed to create a cohesive, enterprise-wide approach to increasing high quality premium growth. Sell the right product to the right customer in the right location. It is far easier to state this than it is to execute, especially if technology is not used to its fullest advantage.

Corporate strategy must reflect organizational goals and provide intrinsic agency-level support, backing them up during the tactical fulfilment of said strategy. This must also incorporate an understanding of the capacity of individual agencies, the geography and subsequent demographics/customer models.

Your technology platform must integrate seamlessly, providing agencies with the knowledge and actionable intelligence (not just data) needed to execute the appropriate actions with the appropriate lead, prospect or customer.

One example of this is sending clear communication to agents about what to sell and not sell at a particular time. A technology platform must be capable of real-time adjustments to agency tools such as marketing lists, propensity scoring and marketing campaigns.

Producers that arrive in the morning to a freshly organized calling campaign list based upon the previous days' weather and environmental reports are at a significant advantage to those having to wait for a revised strategic approach to filter slowly to them.

Linking core technology processes (e.g. claims, underwriting) to overall sales and marketing data is critical in order to create a cohesive view for formulating, applying and measuring your strategy.

The simplest example links the existing book of business into the sales and marketing technology platform. This alone can realize a 50-75% increase in the number of existing customers converted into hot prospects for cross-sell and upsell opportunities 2. (Imprezzio, Inc.) This is vital when considering products that are not price competitive, but can be more easily positioned with an existing loyal customer that that may benefit from multi-line discounts.

MODELING THE WAY FORWARD

The vast array of available information requires that strategies employ a solid foundation of statistical modeling. For cohesive intelligence, the models must include at least the following areas.

Customer

- The Customer-Centric Level matches customer wants, needs and risk tolerance with: customer propensity to buy; agent propensity to sell; customer life events; customer propensity to defect and other key traits that form your proprietary models.

Profit

- At the Profit Level, analyzing market characteristics (economics, demographics etc.) of each geographic area, form an outcome of opportunity per customer targets and subsequent ranking.

Competition

- At the Competitive Level, analyzing price sensitivity and rate competitiveness, plus agency given the households per geographical location.

Quality

- At the Quality Level, the models include projected profit, new business quality, surplus risk and actuarial factors to form an objective view of quality to apply to incoming potential.



THE MODEL

Modeling takes many forms. A simple example of an econometric marketing model methodology factoring in marketing spend for auto is as follows:

Inputs into the model would be collated from various sources, including the technology platform. This is important to note, as the more disparate the data sources are, the more important it is to employ judicious data aggregation, cleansing and analysis.

A technology platform capable of bringing in quality data to the modeling process is becoming essential rather than a luxury.

FINDING AND IDENTIFYING THE RIGHT CUSTOMERS (AND THE RIGHT AGENTS)

In order to identify the right customer for your product, the technology platform must represent and acknowledge the specific, unique aspects of your customer and not some generic CRM record.

The following parameters show the types of pertinent information required to form a clear picture of the customer. This allows utilization of your technology platform to intelligently model, strategize and market. Building trust with the customer through thoughtful data driven marketing campaigns is a key step in understanding the road to premium growth.

SPECIFIC INSURANCE CUSTOMER DIFFERENTIATORS FROM CRMS:

Customer profile

- Household information.
- Demographic info, household members, relationships.

Policy history

- PIF, inception dates, lapse dates, premium history, underwriting scoring, payment history.

Marketing history

- Active/prior campaigns, marketing spend, mailer IDs, mail dates, market segments, household targets.

Loss history

- Date of loss, amount, payout, coverage paid under, MVR history.
- Claims analytics – incorporating more data from core systems and post-claim reporting.

When bringing in structured and unstructured Big Data to match with core systems data, a robust method of recognition is vital to ensure the information captured is correct and can be reliably turned into actionable intelligence.

RECOGNIZING WHO IS WHO

Recognition is the process of receiving a lead and matching it to either an existing customer, existing lead or someone in another consumer database. It solves the problem of finding the correct 'John Doe' in a sea of hundreds or thousands of people with the same name, potentially even living in close proximity to one another.

A solid recognition engine can append data to the lead, prospect or customer records to provide context and a narrative for agents to engage with the customer. This contributes to the back end data models to allow advanced AI models to learn more about customer archetypes.

KNOWING WHAT THEY WANT

When ascertaining a propensity to buy, are we matching the lead up with other products also? Generally, a lead has professed an interest in a particular product. If the lead is interested in a product that has exceeded the underwriting risk tolerance for a particular area, they should be bumped down the call list behind hotter prospects interested in products that work for us from an actuarial perspective.

Just as important as identifying a customer's propensity to purchase a particular product is the intelligence behind your own agency force – are we matching the lead to the correct agent? Geo-location, language specialties (e.g. Spanish speaker), agency performance with that line of business and many other factors can feed into propensity to sell models and lend more accuracy and efficiency to the sales process.

RECRUITING

A technology platform producing large amounts of data on agency performance is a potential goldmine of information that can be used for recruiting. Finding (and keeping) the best talent to maximize distribution channels is a foundation for solid future performance.

The workflow for recruiting follows a familiar pattern. It makes sense to quantify ideal target recruit qualities using agency performance data. This data should be available via your technology platform and readily sliced and diced using an integrated data catalog analyzer. Once the quantification is completed, identification can be performed. Potential recruits can be identified and entered into your recruiting software as 'leads'.

The recruitment leads can be worked much the same as potential policyholders, the system providing Sequential Marketing Programs (SMPs) tailored for specific role types, including stages of progression in the recruitment process. Essentially, successful recruiting can be achieved using a novel application of prospecting methods, giving clear insight to the progress and suitability of each candidate.

Alerting the sales team to new leads as soon as possible cannot be understated. There are various methods to achieve this including Imprezzio's patented LeadFlow technology³, covering lead filtering, distribution and routing.

Internal studies have shown a sub 3-minute window forms the greatest likelihood of achieving a quote. Utilizing a high performance technology platform can bring the alert time down to a consistent sub 3-seconds, ensuring the information-age customer receives almost real-time feedback and the sales engagement can begin.

The following areas warrant their own publications and will be discussed as part of this series of White Papers:

Marketing Automation

- Take a new lead and automatically apply the best customer contact strategy based upon prior knowledge and experience and being able to tailor this in real-time.
- Special SMPs should be created e.g. customers who have had a claim recently will need a different approach than someone on a general retention program.
- Corporate message consistency – reviewed and approved media in a Marketing Asset Library.
- Mobile Technologies supporting key strategic actions from anywhere.
- Social Media engagement, ROI and analytics.

Distribution Management & Transformation

- Channel and segmentation analysis with instant, enterprise-wide alignment to a modified strategy.
- Fulfillment - cost savings, efficiency and multi-channel planning

Sales & Performance Management

- Reinforce and promote income producing activities.
- Align bonus and compensation plans to motivate and drive the sales team.
- Support growth through incentives, focused task tracking and management.
- Track ROI for both agencies and corporate. For example, agents must see ROI to understand the need to invest time in using technology to their best advantage.
- Track sales, activities, marketing analytics, incentives and compensation management.

Insurance CEOs have stated that their primary goals for technology are:

- Giving their agencies a competitive advantage
- Ensuring the integrity and security of the data
- Achieving these goals in a timely and cost effective fashion

Generic platforms such as CRMs can be useful as part of the overall technology solution, but avoiding specialization ignores one key fact that major insurance carriers should be cognizant of, namely that their technology partners should not only be experts in the technology they produce, but be experts in the field of insurance.

The depth of technology from the back end systems to the end user is increasing. The number of insurance-centric technology partners with a solid understanding of this depth of technologies are decreasing. Be sure to carefully choose a technology partner with proven domain level experience from Platform as a Service (PaaS) right through to user interface and user experience (UX).



IMPREZZIO

ABOUT IMPREZZIO

The Imprezzo group's broad range of capabilities provide our clients with a full spectrum of services:

- Enterprise-grade insurance software platforms
- Customized software solutions
- Statistical Analysis and Business Intelligence Services
- Marketing, Media and Branding Agency Services
- Full service global IT solutions outsourcing and consultancy

Our products, services and media solutions give clients a competitive advantage through **customized software solutions, marketing automation alignment, transforming data into actionable information and creating strong brand strategies**. Imprezzo's clients are able to efficiently transform and address market opportunities and react to change.

As a leader in marketing automation and distribution transformation, Imprezzo's flagship Agents Ally platform combines our broad skillsets and industry knowledge to provide a highly secure and scalable solution that offers unparalleled Multi-Channel Marketing Automation, Sales and Performance Management, and Distribution management and analysis.

ABOUT THE AUTHOR

Neil Hargreaves is the Executive Vice President of Imprezzo Inc., responsible for their major operational functions and business interactions. Neil's technical background helps greatly in understanding the more challenging aspects of our large software endeavors.

Neil has 18 years' experience in the technology sector, having been previously involved in the automotive field. He worked for Torotrak, an advanced R&D company, designing and implementing control systems for advanced powertrains (including patented IVT and CVT transmission technologies). Neil went on to run the European operations for Accurate Technologies, Inc., an American software and electronics firm designing and manufacturing extremely high performance control system analysis tools. He was responsible for global business development with most of the major automotive manufacturers such as Ford Motor Company, Toyota, Volkswagen Audi Group, Scania, General Motors and many others. Neil moved to the USA to take over technical and operational direction for Accurate Technologies in Detroit, Michigan, managing the engineering division as Director of Product Design. It was from here that Neil moved to Imprezzo to take on the challenge of a new industry and the more rapid pace of technological change in the realm of web-based software and large server applications.

Neil completed his education in England, gaining separate degree level qualifications in Business and Computer Science, majoring in artificial Intelligence.

REFERENCES

1. Nicholas Chen, Towers Watson.
<https://www.towerswatson.com/en/Insights/Newsletters/Global/Emphasis/2014/the-internet-of-things-is-transforming-the-insurance-industry>
2. Imprezio, Inc. proprietary anonymized, aggregated data study, 2015.
3. Imprezio, Inc. patent no. US 8,600,795 B2, Dec. 3, 2013

FIGURES

FIGURE 1

<http://www.slideshare.net/MapRTechnologies/the-future-of-hadoop-mapr-vp-of-product-management-tomer-shiran>

FIGURE 2

<http://www.towerswatson.com/~media/Images/Insights/Newsletters/Global/Emphasis/2014/the-internet-of-things-is-transforming-the-insurance-industry-fig2.jpg?la=en>

