

Building a Code Halo Economy for Insurance

By finding meaning in the digital data that accumulates around people, processes, organizations and things, insurers can simultaneously reinvent how they operate and reshape their customers' experience.

KEEP CHALLENGING™

Executive Summary

In today's quickly digitizing marketplace, organizations that cling to business models based on traditional approaches are destined to be overtaken by more nimble and open-minded competitors.

Companies - whether born digital or long-time industry stalwarts - are increasingly figuring out how to apply social, mobile, analytics and cloud technologies (the SMAC Stack™) and the Internet of Things (IoT) to achieve unprecedented business advantage. Those that emerge as frontrunners will be those that learn to distill meaning from the digital information (or Code Halo™) that encircles people, processes, organizations and devices. As discussed in our recent book and white paper on Code Halos,¹ companies that believe they are immune to the changes imposed by accelerating digitization run the risk of becoming irrelevant or, worse, extinct.

This white paper discusses how insurers can identify value creation opportunities in the new Code Halo economy and jumpstart their efforts to "win the code rush." We emphasize the need for insurers to reinvent enterprise processes and reshape the customer experience, and we provide a view on how insurers can decode the "anatomy" of Code Halo solutions and apply the Crossroads Model² to not only survive but thrive in the years ahead.



Code Halo's Relevance to Insurers

As in other industries, Code Halo solutions can catalyze growth for insurers by introducing new business models and melding business processes to deliver meaningful value to customers via customized products and services. For insurers, the transition to Code Halo thinking entails a mindset shift characterized by the following:

- Everything is data, and data is everything.
- Making meaning from data is the new competitive frontier.
- Digitization requires new and innovative business models.
- Prediction and prevention trump compensation.
- Personalize experience and service using data insights.

Everything is Data, and Data is Everything

Insurance is a data-driven industry. Customer Code Halos, created by consumers through their online behavior and interactions in the digital world, enable insurers to decode customer needs, preferences, sentiments and grievances. When these digital footprints are combined with other halos, and are aided by smart devices, the resulting insights can help insurers anticipate work-related risk exposures, leading to improved workplace safety and reduced worker's compensation costs. For instance, a worker equipped with a wearable sensor could be alerted to immediate hazards through proactive analysis of his enterprise halo (machines and work processes in his functional area) and his personal halo (attitudinal disposition and vital health parameters).

With Code Halo thinking, insurers can better understand the existing risk profile, uncover new exposures, and arrive at predictive analytical models for optimizing pricing strategies, improving underwriting decision management and sharpening loss prevention strategies.

Code Halos are also generated by the unstructured data captured in the form of underwriting submission documents, claims adjuster notes, claims survey images and videos, third-party witness notes and social media interactions. This data – when integrated with geospatial data, aerial and satellite imagery, weather events, traffic patterns, medical research artifacts and historical data and trends – creates a digital footprint of customers that can be used to derive valuable insights.

Each of these digital halos can be broadly categorized as core, non-core and external. For instance, Figure 1 (next page) shows how customer Code Halos constitute core data comprising age, address, etc.; non-core data representing online history, call logs, etc.; and external data collected from sources such as social media and data aggregators (i.e., the crime rate for where the insured resides).

Categorizing Code Halos



Figure 1

Making Meaning from Data Is the New Competitive Frontier

Using Code Halo thinking, insurers can mash customer preferences with statistical inferences derived from actuarial studies of aggregated historical data. By doing so, they can better understand the existing risk profile, uncover new exposures, and arrive at predictive analytical models for optimizing pricing strategies, improving underwriting decision management and sharpening loss prevention strategies. These actionable insights can further enrich the Code Halo with inputs that can dramatically transform underlying operating assumptions or intelligently dictate process change.

For instance, personal lines insurers can factor in customers' behavioral patterns and offer a personalized merit rating rather than a traditional class-based rating solely based on demographics.

Digitization Requires New and Innovative Business Models

The meaning that insurers can derive from Code Halos can be exploited to develop innovative business models. For instance, insurers have discovered that when pricing is tied to usage and behavior, the loss ratio can be improved, as seen in the auto insurance industry's "Pay How You Drive" offerings. This usage-based business model aligns driving behavior with premium rates. By deploying in-vehicle telematics devices or smartphone apps, insurance carriers can directly monitor driving performance (such as speeding, acceleration, hard braking, cornering or distracted driving) and driving conditions (such as location, time, distance, weather, traffic, pathway hazards), and then price policies (i.e., assess risk) accordingly. They can also deliver real-time feedback in order to promote safe driving practices and prevent losses.³

Prediction and Prevention Trump Compensation

Rather than treating insurance as a means of compensation, emerging technologies are enabling insurers to predict, prevent and control losses. Gartner estimates that the IoT will include 26 billion device units by 2020.⁴ Insurance carriers can build a smart ecosystem that monitors events flowing in from various IP-connected devices and internal sources in real-time,

correlate patterns with external data sources and anticipate hazards. They can then establish an automated closed-loop feedback mechanism to prevent, mitigate and predict future losses.

There are many benefits to this approach. The carrier, for example, could create a tailored risk profile for each customer and better match the premium offered with the risk characteristics presented. The carrier can also influence customers to adopt loss control measures to gain premium advantage. Moreover, it can gauge a prospect's overall risk profile to avoid adverse selection.

Personalize Experience and Service Using Insights

Insurers need to offer specialized treatment consistently across all customer engagement touchpoints, from marketing to claims servicing. Because Code Halos enable insurers to better understand customer needs, they can help build trust and enable the insurer to seek every opportunity to indemnify the insured. The salesforce can gain insight into the customer's world and offer adequate levels of protection by suggesting appropriate coverage. In this way, insurance companies can offer a virtual protection/security blanket by anticipating potential risks and preemptively offering assistance. Upon sensing a hazard, an insurer could even inquire about the customer's safety and collate data on his behalf to proactively file a claim and ensure that the settlement experience is seamless and hassle-free.

Insurance Industry Code Halos

Figure 2 depicts six types of Code Halos that accompany customers, risks, products, employees, partners and the enterprise. When used properly, these halos can reshape the organization and place it on a trajectory toward delivering superior business results.

Enterprise Code Halo Types

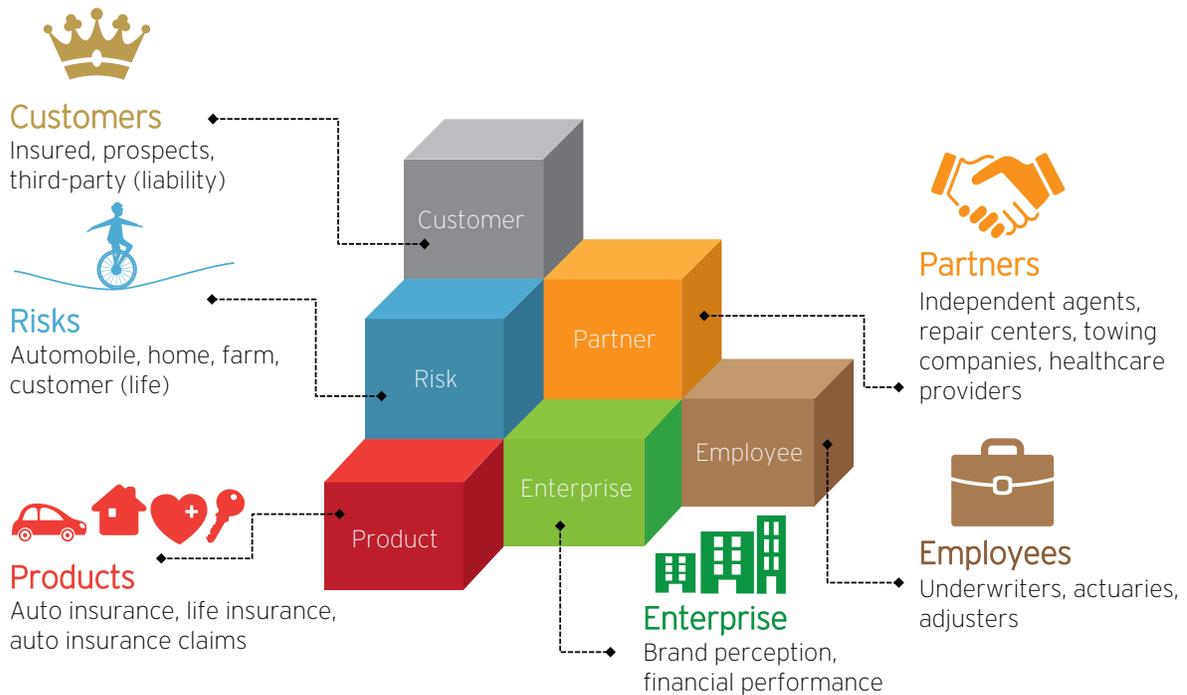


Figure 2

Upon sensing a hazard, an insurer could even inquire about the customer's safety and collate data on his behalf to proactively file a claim and ensure that the settlement experience is seamless and hassle-free.

Customer Halo

By gathering data and leveraging insights to enrich the customer experience, customer Code Halos form the new basis of customer relationships. Data can originate from various customer touchpoints and channels and introduce new possibilities for engagement and personalized services. Customer halos can provide valuable insights about product preferences, channel preferences, satisfaction levels, lifestyle events and risk profiles.

Using customer Code Halos, forward-thinking insurers are launching digital marketing campaigns to better engage with tech-savvy consumers. The auto insurance provider Esurance, widely popular for its innovative digital marketing initiatives, partners with marketing agencies and offers wristbands at events, such as music⁵ and food festivals.⁶ By analyzing data made available through these bands, such as where attendees check in, what food they eat and what photos they upload and share with friends, the company develops a cornucopia of insight on user preferences and attitudinal disposition to assess risk.

Risk Halo

All of the insurable exposure units that are subject to risk in the context of insurance products – such as auto, home (building and contents), watercraft and its environment – can generate rich Code Halos. These must be seamlessly integrated with the insurer's core business processes to facilitate prudent decisions. As such, they can help insurers create value from the increasingly smart, connected world. In some cases, the exposure units could be the customer and his financial circumstances, as in the case of life, annuities, retirement and health insurance, in which customer and risk halos are tightly coupled.

When it comes to P&C lines, many possibilities are presented by connected, smart devices in terms of providing value for insurers and customers in making informed decisions. The classic example is Google's Nest home automation platform.⁷ Taking their cue from Nest, insurers can use smart devices or sensors to help with loss detection, prevention and control, and taking the next course of action. Relevant use cases for IoT and insurance are presented in Figure 3 (next page).

Product Halo

The auto and home insurance sectors have halo entities that signify the product's historical performance, market forecasts, economic climate, customer demographics, regulatory environment, distribution channels, competition and customer sentiment. When product Code Halos interact with business processes, they generate streams of data that can provide insights into predicting the product's future outcomes. Alternately, these halos could be seen as digital representations of key activities in areas such as underwriting, claims, etc., or what we call a process Code Halo.

Employee Halo

Employee Code Halos can transform and enrich the work experience. For instance, underwriters, actuaries, claims adjusters and call center representatives are better equipped to evaluate a prospective customer's application or service existing customers when they are facilitated with the most appropriate organizational assets and suitable recommendations from historical records. By gaining access to each other's halos within an enterprise network, employees can collaborate on solving business problems in an agile and effective manner.

The IoT and Insurance

Functionality	Scenario
Notify stakeholders of an impending problem.	A sensor detects a leaky roof and sends an alert to repair the damages preemptively.
Notify other devices on the network to prevent further damage.	Services such as “if this, then that” (IFTTT) ⁹ can be configured so that when an electrical short circuit is sensed in the network, users are notified. If the device is aware that the user is away from home during that time, or if the user does not acknowledge the alert within a threshold timeframe, the main electricity supply is cut off.
Detect the actual cause of loss.	The device determines whether damage is caused to a property by wind or flood.
Resolve coverage conflicts between excluded and ensued losses.	A sensor detects that a faulty construction has caused water damage, which leads to mold damage, making the house uninhabitable.
Detect a hazard in the vicinity and trigger action.	A device senses a fire in the neighborhood and notifies the fire service.
Request assistance in case of emergency.	A wearable sensor worn by a senior citizen alerts emergency assistance if the person falls.
Detect seasonal hazards and auto-adjust.	A sensor monitors carbon monoxide levels to prevent poisoning when temperatures rise and fall during winter and autumn.
Alert other devices on the network to avert hazards.	When a connected vehicle suddenly applies its brakes, devices in surrounding vehicles receive alerts to avoid a multi-vehicle collision.
Record details of an event.	A black box implemented in a vehicle detects the cause of an accident.
Function as structural health monitors.	A device captures the vibrations and material conditions in buildings to prevent a future loss condition.
Detect staged frauds.	A device distinguishes between staged rear-ending vs. accidental incidents.
Facilitate remote monitoring of equipment.	Boiler and machinery equipment transmit data to detect anomalies and avoid sudden equipment breakdown.
Facilitate tracking during transit.	A sensor in the valuable property or at strategic points of a fleet relays the location and shipment conditions of valuable property prior and during transit.

Figure 3

Partner Halo

By generating a rich halo around independent agents and brokers, repair centers, towing companies, mortgage companies and healthcare providers, insurers can better equip their partner ecosystem to meet customer expectations. Health insurance giant Aetna, for instance, partnered with Inova, a nonprofit healthcare system, to transform how healthcare is delivered at an affordable cost by creating an ecosystem of physicians, patients or members, health systems and health plans. This enables the insurer, provider and member to access real-time data in all phases of care, resulting in a better member experience.⁹

Enterprise Halo

The enterprise halo of the insurance carrier is formed by the general perception about the brand. This can include customer sentiment about a marketing campaign, rate increase or claims assistance; analyst opinion regarding a new product launch; media coverage regarding a litigation case recently lost by the firm; and the financial performance of the organization. Insurers must realize that new-age marketing is all about managing the enterprise halo. It is not enough for carriers to listen to social conversations; it is equally important to engage, analyze and proactively respond to discussions to build brand equity, provide quality service and improve customer retention.

Understanding Code Halo Intersections to Extend Business Process Efficiency

The fusion of numerous halos is not merely the sum of the individual halos. Their convergence, rather, has the potential to reshape business and drive transformational efficiencies. By seeking

meaning at various Code Halo intersections, insurers can explore new distribution channels in which to bundle value-added services and integrate them with their core offerings.

Service providers can be automatically notified when emergencies arise, a capability that becomes extremely valuable when coordinating immediate assistance and delivering personalized services. In our view, the result will be more expedient claims settlement and enhanced customer satisfaction.

The sidebar below depicts a scenario in which business meaning and action can be derived from the intersection of an employee Code Halo with customer and process halos to improve stakeholder efficiency and render the business process more efficient.

Applying the Crossroads Model to Insurance

Given its innate character and historical structure, the emerging Code Halo economy presents a significant number of opportunities and threats for insurers, as revealed in Figure 4 (next page). Digital transformation is already underway, and it will evolve rapidly, leaving behind those who fail to sense the opportunities.

Because of this rapid shift, it has become imperative for insurers to understand the dynamics of Code Halo thinking and prepare for impending industry transformation in a structured way. Figure 5 (next page) depicts our Crossroads Model as a prism for understanding the emerging industry transformation.

Figure 6 (page 11) defines and illustrates how insurers can act on the five stages of the Crossroads Model.



Quick Take

Decoding Halo Intersections to Counter Claims Fraud

Imagine a scenario in which a claimant notifies the insurer of a loss following a multi-car collision. The system auto-assigns the case to a field adjuster who resides nearby and experience with similar claims. The adjuster receives a notification on his mobile about the assignment and views the claim details on his tablet, as well as similar cases that he has appraised in the past. The case under consideration is flagged as potentially fraudulent, due to suspicious indicators discovered while correlating the data submitted by the claimant, including past claims history, police reports, NICB reports, the event recorder in the vehicle and witness testimony. The analytics reports indicate that although there is an overall reduction of multi-car collision claims in the state, a sudden spike is reported in and around the region where the claimant resides.

The adjuster records his views and submits the case to the special investigation unit (SIU). The SIU officer receives an instant task notification on his Google Glass and views the adjuster's findings. With a Glass-based facial recognition app, the SIU officer confirms that witnesses testifying to these cases have criminal backgrounds.

The SIU officer expands the social graph of the parties involved and notices professional affiliations among them. He senses that a series of staged multi-vehicle wrecks were conducted by the members of the ring. He further observes that those involved have frequently changed their name, employer name and employment status in their social networks, possibly in an attempt to qualify for financial loans. Upon further investigation, the financial records prove they are regular defaulters, and with solid evidence on hand, the fraud ring is busted.

By facilitating access to the appropriate Code Halo assets, social analytics reports and collaboration tools, insurers can decode information more quickly, maximize employee efficiency and save money that would otherwise have been spent on settlement payouts.

To learn more about how Google Glass can transform the insurance industry, read our white paper¹⁰ and watch our video series.¹¹

Insurance Industry Code Halo Pluses and Minuses

Strengths

- Data-driven industry.
- Sophisticated predictive analytics and risk analysis models already prevalent.
- Surge in mobility technology adoption.
- Customer-centricity and member care is of utmost priority
- Match price to risk characteristics.
- Analyze past data to improve future experience.

Opportunities

- Expand globally and identify new market segments and distribution channels.
- Launch innovative business models, new products and services.
- Complete a radical makeover as a service provider (prevention over compensation).
- Offer accurate pricing with real-time monitoring of the individual's risk characteristics.
- Strike collaborative ventures with partners, translating into unique value propositions.
- Deliver an enriched customer experience at an affordable cost.
- Offer a personalized experience that is genuinely helpful to indemnify rather than self-serve.
- Influence safe behavior to reduce losses and expenses.
- Build a contextualized workstream with ease of knowledge access for employees.

Weaknesses

- Conservative and cautious approach to new technology adoption.
- Followers rather than leaders of innovation.
- Stringent regulations imposed by industry, government and legal entities.
- Diverse rules and state laws applied differently across geographic regions.
- Not entirely consumer-facing; much of distribution is intermediary-driven.
- Absence of systems of engagement in both the employee and customer contexts.

Threats

- Lag in government, regulatory and legal bodies to adapt to changes in technology advancements.
- Challenges posed by collecting and codifying a massive amount of Code Halo data.
- Security and privacy issues .
- New types of emerging risks.
- New basis of competition from startups, technology players, peer industries and data owners.
- New technology innovations modifying the standard definition of "insured" or "property insured."
- Scarcity of the right talent mix.

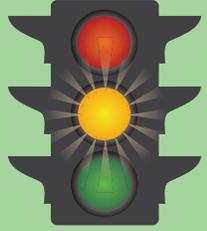


Figure 4

Viewing Insurance through a Code Halos Lens

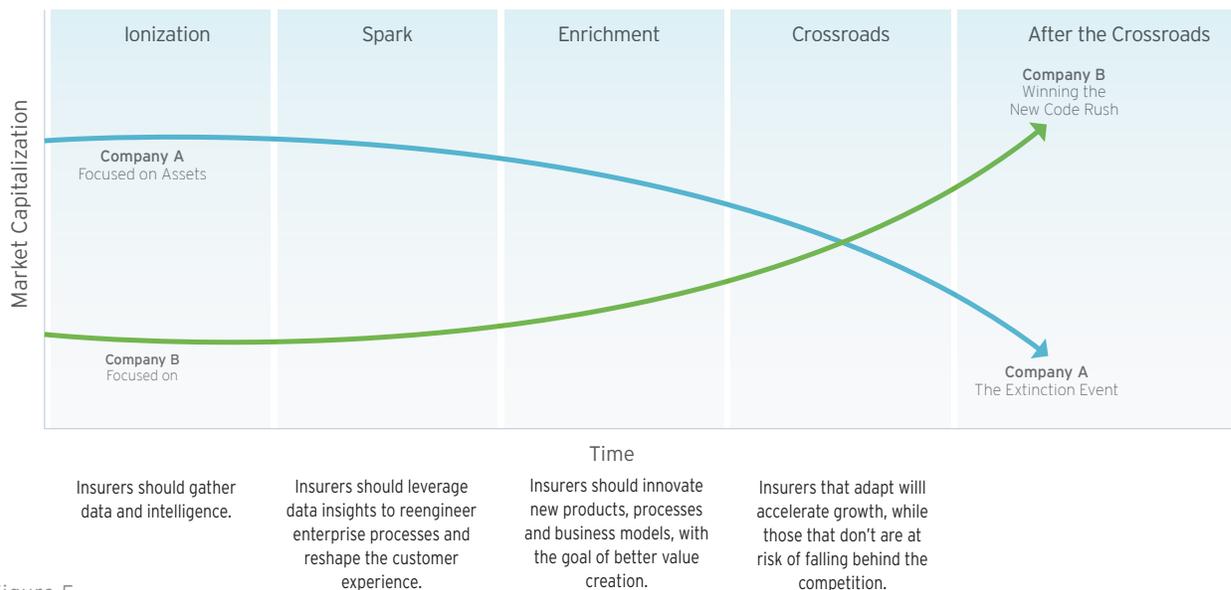


Figure 5

Insurance at the Crossroads

Stage 1

Ionization: A fertile context for innovation

Key Actions

- Prepare the organization for innovation.
- Assess how Code Halo connections can transform business processes, such as sales acquisition, underwriting, claims and customer service, in the value chain.
- Conduct a market scan to detect signs of ionization.
 - Look at what competitors or startups are doing.
 - Read analyst reports to understand trends.
 - Observe/act upon competitive shifts more quickly.
 - Learn from peer industries.
- Choose Code Halo targets and list pilot ideas.
 - How might we disrupt the insurance industry?
 - Which business process should we focus on?
 - What moments of engagement are most relevant?
 - What attempts are already made to address this issue, and what can we learn from those?
- Assess and rank pilot ideas.
- Focus on key metrics: new business success rate, renewal retention ratio, improved loss ratio, average cost per claim, average claims settlement time.

Stage 3

Enrichment: Turning a Spark into a blaze

Key Actions

- Develop a balanced focus on five elements. For example, in the case of usage-based insurance:
 - Amplifier (implement IP-addressable smart devices): Install telematics devices in the vehicle.
 - Application interface (deliver a rich user experience): Offer smartphone apps to deliver premium notifications and discounts.
 - Data (collect raw data): Collect data on driving patterns like speed, acceleration, hard braking, cornering.
 - Algorithm/meaning-making (decode data to deliver insights): Use data analytics to calculate a driver safety score based on driving patterns and charge premiums accordingly.
 - New business model (monetize meaning): Calculate premiums based on driving behavior.
- Constantly refine the user experience.
- Use metrics to know when Code Halos are inflating. Measures could include total number of users signing up, volume of data, user engagement, repeat visitors, revenue, cost of acquisition, growth curve, etc.
- Capture code and make meaning (i.e., actionable insights).
- Don't overlook change management.

Stage 2

Spark: Where Code Halos collide and businesses change

Key Actions

- Embrace mass personalization (i.e., target customers in the age group 18-25).
- Build Code Halos around core processes such as claims.
- Calibrate a "give-to-get ratio" (e.g., a driver might be willing to share his driving data in exchange for significant premium savings).
- Pilot and fine-tune the business model.
 - Understand process changes.
 - Do not lose sight of conflict with existing modes of doing business (i.e., a direct-to-customer-facing Code Halo solution might conflict with agent-based marketing and distribution).
 - Build a business case, broadly outlining the investment and ROI.
 - Ensure the solution aligns with the organizational culture.
 - Synergize with the partner ecosystem and recognize win-win opportunities.

Stage 4

Crossroads: Where markets flip

Key Actions

- Continuously enrich the solution.
- By meeting customer expectations, stay ahead of the competition and retain customer loyalty.

Stage 5

After the Crossroads: Winning the code rush

Key Actions

- Analyze the company at the process level and choose the key processes for transformation.
- Treat people, product and the organization as code.
- Address security, privacy, regulatory, legal challenges. (Insurers should work collaboratively with IT, regulatory and legal bodies to overcome challenges rather than resisting industry change.)
- Embrace SMAC and IoT technologies.
- Embrace Code Halo thinking to create value.

Market Scan of Code Halo Incubators

By gathering data and intelligence, insurers can sense the disruptive innovation in their industry and observe the competitive shift. Figure 7 highlights a handful of Code Halo incubators that are on a trajectory to convert early-mover advantage into market ascendancy.

Incubating Code Halos

Example	Salient Features	Current / Expected Impact
P&C Insurance Personal Lines (Auto, Home, Property, Travel)		
MetroMile, a U.S.-based car insurance startup, charges customers for the actual miles they drive, offering a significant cost advantage to those who drive fewer miles.	<ul style="list-style-type: none"> • Targets people who drive less than 10,000 miles annually. • Offers pay-per-mile model for auto insurance. • Offers free diagnostic device, Metronome, which serves as a personal driving dashboard (think Fitbit for the car). • Relays information to a mobile app. • Tracks and optimizes gas usage. • Compares trips for a smarter commute. • Shows how driving patterns affect fuel efficiency. • Monitors engine health. • Receives automated street sweeping alerts to avoid tickets. • White-labels insurance from a major carrier and receives a cut of insurance fees. 	<ul style="list-style-type: none"> • Fair-priced insurance. • Average annual savings of \$400.¹² • Real-time driving feedback powered by mobile, cloud and analytics. • Data-driven insights. • Enabler for smart decisions. • Competitive advantage by offering the cellular-based diagnostic device free of charge.
Kroodle, a subsidiary of AEGON Netherlands, claims to be a 100% digital insurer, targeting young, tech-savvy, mobile users, with transactions facilitated through Facebook. ¹³	<ul style="list-style-type: none"> • Targets the 18-to-35-year-old customer segment. • No paperwork, no policy number needed. • Closer tracking and analysis of customer attitudes, opinions and needs. • Binded policy delivered in one minute. • Pay-as-you-use model for travel insurance. • Customers rewarded for referrals. • Data stored in Kroodle data systems. • New product offerings, such as “gadget insurance.” 	<ul style="list-style-type: none"> • New acquisition models. • Low acquisition and sales cost. • Low cost to serve. • Limits claim ratio and fraud. • Ease of use. • 24x7 support in social channels. • Hassle-free processes, servicing and administration. • Transparent communication.
Friendsurance, a Berlin-based startup, has implemented the concept of online peer-to-peer insurance, which combines social networks with well-established insurance companies.	<ul style="list-style-type: none"> • Peer-to-peer insurance model. • Friends in social networks form a pool to insure each other. • Small claims are mutually funded by the friends pool and not by insurance. • Big claims are settled by insurance carriers. (No claims: 100% cash back. One claim: Reduced cash back. Many claims: No cash back, stop-loss provisions.) • Incentives are rewarded for viral growth of the pool. • New product offerings, such as iPhone/iPad insurance. 	<ul style="list-style-type: none"> • New acquisition models. • Low acquisition and sales cost. • Lower annual premium up to 50%.¹⁴ • Reduced fraud. • Avoidance of adverse selection. • Reduced administration costs. • Transparent communication.
StateFarm, a U.S.-based property insurer, has partnered ¹⁵ with ADT Pulse, a home security and automation firm, to encourage policyholders to ensure home safety.	<ul style="list-style-type: none"> • Free in-home security consultation. • 24x7 professional monitoring by trained ADT security specialists. • Ability to qualify for home insurance discounts. • Home video surveillance from anytime, anywhere. • Management of energy consumption through control of thermostats, small appliances and lights. • Protection against fire, theft, burglary, flood and carbon monoxide poisoning. • Sensor-based monitoring for water leaks. • Real-time alerts . 	<ul style="list-style-type: none"> • Enhanced security. • Emergency assistance. • Prevention or mitigation of home burglary or fire losses to save costs. • Ability to control home remotely. • Remote monitoring to ensure safety of family members.

P&C Commercial Lines (Farm Insurance)

<p>The Climate Corporation (acquired by Monsanto¹⁶), a San Francisco-based firm, helps farmers protect and improve their farming operations by combining hyper-local weather monitoring, agronomic data modeling, and high-resolution weather simulations.</p>	<ul style="list-style-type: none"> • Optimized and customized risk management plan. • Adaptive, flexible coverage structure. • Automatic notification when field-specific crop models show weather-driven yield losses. • Rainfall and temperature grids to accurately capture weather conditions. • No premium payment until end of coverage period. • No paperwork for claims, paid automatically. 	<ul style="list-style-type: none"> • Informed decision-making powered by big data analytics, climatology and agronomy. • Prediction of loss frequency and severity. • Hassle-free policy payment and claims processing. • Improved profits for customers. • Higher operational efficiencies.
<p>Econet, a wireless telecommunication provider based in Zimbabwe, has launched Ecofarmer, a micro-insurance product that leverages mobile technology, backed by a highly innovative weather monitoring network, to aid farmers.</p>	<ul style="list-style-type: none"> • Insurance for as little as 8 cents per day.¹⁷ • Premiums deducted from prepaid phone account. • Farmers allowed to make a financial claim if their crops fail due to either inadequate or excessive rainfall. • In the event of a drought, \$100 paid for every 10kg seed pack planted. • Base station in the farmer's area monitors weather patterns, including rainfall, temperature and humidity. 	<ul style="list-style-type: none"> • Tips on farming and market outlook. • Precision weather monitoring. • Assured payments for bad weather. • Increased yields. • Informed decision-making. • Loss prevention. • Ease of payment. • Value-added services to underserved markets.

Health Insurance

<p>Tokio Marine & Nichido Fire, a leading auto insurer in Japan, is a 135-year-old company that continues to create unique product propositions by leveraging digital capabilities using the latest technologies, including context-aware computing, motion capturing and bio-sensing.¹⁸</p>	<ul style="list-style-type: none"> • Easy-to-buy medical insurance. • Distributed via mobile phones. • Partners with mobile phone service provider. • Monitors daily activities. • Active health monitoring through sensors and proactive disease diagnosis for women. • Uses gamification to promote safe health practices; issues reward points that can be exchanged for goods. 	<ul style="list-style-type: none"> • Ease of access. • Advisory services in mobile. • Monitors, promotes and rewards safe health practices. • Leverages business alliance partnerships.
<p>WellPoint, the health insurance giant, and IBM have partnered¹⁹ to utilize Watson's artificial intelligence technology to harness big data and apply insights from medical literature to clinical information about particular patients and offer evidence-based diagnosis or treatment (solution in progress).</p>	<ul style="list-style-type: none"> • Health analytics model. • Integrates clinical decision support tools with patient diagnosis/treatment. • Helps physicians connect smart devices (phones, tablets) to electronic medical records (EMRs). • Voice recognition features for record retrieval. • Facilitates remote monitoring by physicians, especially for patients with chronic diseases. • Delivers patient data (pulse, blood pressure) from medical devices to a Bluetooth-enabled smartphone for real-time monitoring by nurse care coordinator. 	<ul style="list-style-type: none"> • Instant access to patient records. • Real-time and remote patient monitoring. • Informed decision-making. • Faster cure and recovery. • Cost-effective. • High-quality care.

Life Insurance

<p>MetLife, a U.S.-based life insurer, launched MetLife Wall,²⁰ a Facebook-like app that aims to speed interactions between service agents and customers to extend customer centricity.</p>	<ul style="list-style-type: none"> • Provides a 360-degree view of the customer transactions. • Collects data from more than 70 legacy systems in near real-time. • Enables agents to quickly retrieve relevant information based on customer query. • Paired with cloud-based CRM system. • Plans to create next-best-action model to guide agents on how to work best with clients and prospects. 	<ul style="list-style-type: none"> • Integrated view of customer transactions. • Easier and faster retrieval of customer records. • Intuitive user interface. • Identification of cross-sell opportunities. • Improved customer satisfaction.
<p>Munich Re, a U.S.-based reinsurance carrier, uses an evidence-based medical research model on breast cancer to roll out competitive coverage offers earlier in the disease progression, whether after treatment or in early stages.</p>	<ul style="list-style-type: none"> • Uses a calculator tool²¹ to draw on extensive research, demonstrating that more breast cancer survivors are insurable. • Guides the underwriter through a series of questions/dropdowns to calculate the appropriate rate for survivors or early-detection patients. • Considers specific conditions of the policy applicant. • Uses customized rating grid for non-standard cases. • Makes favorable policy offers earlier. 	<ul style="list-style-type: none"> • Reflects medical treatment advancements in coverage provisions. • Provides competitive offers. • Faster underwriting. • Lower premiums. • Increased sales. • More favorable policy ratings. • Higher customer satisfaction.

Figure 7

Insurers in several industries are now entering Stage 1 of the Crossroads Model by preparing their organizations to innovate around Code Halo thinking. P&C carriers and health insurers are now showing the way to their life insurance counterparts by moving briskly into Stage 2, in which enterprise processes are reinvented to pave the way to newer business models and reshaped customer experiences.

Overcoming Challenges

Notwithstanding the plethora of opportunities presented by the Code Halo economy, insurers face a host of challenges when they work to catalyze the business atmosphere for transformative change. We offer the following advice for businesses to begin working to overcome these obstacles:

- **Influence and change perceptions.** Insurers must change current customer perceptions of insurers as being merely entities that compensate for adversities, to being virtual guards who create a security blanket around the insured, ensuring their well-being. An auto insurer should influence safe driving habits; a home insurer should enable safer home ownership behaviors; a life and health insurer should boost customers' health quotients. Insurers should provide services that establish a trusted relationship, in which customers are comfortable sharing data and are unconcerned about unwanted intrusions into their privacy. Within their own organizations, insurers need to establish the right talent mix and groom employees for the future of work. They should build a participative and collaborative culture, enabling the employee community to collaborate and engage more effectively among themselves and with customers.

Insurers must change customer perceptions of insurers as being merely entities that compensate for adversities, to being virtual guards who create a security blanket around the insured, ensuring their well-being.

- **Build an effective partner ecosystem.** Insurers also need to better enable and engage with their intermediaries. They should be aware of the potential conflicts that can arise with agents and brokers when adopting newer models of sales and distribution. Mutual win-win opportunities should be pursued as the highest priorities. The partner ecosystem is expanding, with a multitude of service providers specializing in sensor technology, data analytics, business intelligence and business process management, all of which can significantly impact insurers' key business metrics. For instance, Screenshot offers a mobile self-service claims solution with robust analytics that reduces cycle time and cost per claim and improves the end user experience. Screenshot has gained patronage²² from major insurance carriers and their customers. Insurers should look to collaborate with telematics providers, sensor manufacturers and social data aggregators to build an effective partner ecosystem to deliver the right value proposition to target customers.
- **Identify the "white space."** With the evolving digital economy and enhanced customer expectations induced by technological revolution, new opportunities beckon. Particularly in the shared economy, fresh players and newer models are evolving, and insurers need to capitalize on them. For instance, on-demand, peer-to-peer ride-sharing startups such as Lyft, Uber and Sidecar are said to be considering liability protection to drivers and passengers.²³ This could be a specific target customer segment to which insurers could offer custom coverage by gathering data and analyzing the unique risk appetite. Insurers need to be on constant watch to disrupt the marketplace.

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- **Make core processes smart.** Insurers should delight end customers by making meaning from process Code Halos that enable the insurance process to behave “smartly.” A life underwriter could be referred to a recent development in the medical field that would make coverage acceptable at a fair price while reviewing a prospect application. Or, a change in a state law could be seamlessly applied to core processes; for instance, laws can affect young and middle-aged drivers differently, and notifying them in a timely and contextually relevant way would reinforce customer loyalty.
- **The gamut of smart devices in the interconnected world could affect the basis of settlement.** Insurers are expected to examine the varied liability possibilities that smart devices present and document them with an appropriate response. Ultimately, they should ensure that claims are settled in a hassle-free manner for the insured.
- **Work around the security.** There is no doubt that the issues of security and privacy posed by the connected world are very real and pose particular concern for insurers. The possibility of cyber threats and malicious attacks is on the rise, and the underlying risks are difficult to quantify from an actuarial point of view. Risk avoidance is not always the best risk management strategy. Consequentially, insurers would be wise to learn the language of Code Halos to accumulate data on the risk halos of the virtual world and convert them to smart algorithms to work around the security challenges.

Insurers need to work closely with device manufacturers, service providers and IT professionals to enhance security measures. Regulatory, legal and government bodies must be pushed to drive prudent and agile decisions. Still, customers might continue to be apprehensive about allowing insurers to access their data. When insurers are transparent about how they handle customer data, and demonstrate that customers will receive higher value service in return for data-sharing, customers might be more willing to opt in to the choice of sharing their data.

Looking Forward

In the Code Halo economy, traditional carriers face competitive threats from not only industry startups, but also financial institutions, telecommunication providers, home security companies, retailers, car manufacturers and dealers, and even online service providers such as Google and Amazon.²⁴ Particularly, tech-savvy companies are unleashing the power of new digital technologies to provide customer-centric services by codifying customer Code Halos and interpreting meaning from intersections with enterprise, process, employee, partner and device halos. Emerging disruptors are bringing impressive data analytics expertise to the table.

When personalized services are offered at a low price, generating value of perceived interest, consumers might be willing to share personal data with these players and switch loyalty. By following the Crossroads Model, insurers can reimagine the future of work and attain market prosperity, while avoiding irrelevance.

Footnotes

- ¹ For more on Code Halos and innovation, read “Code Rules: A Playbook for Managing at the Crossroads,” Cognizant Technology Solutions, June 2013, <http://www.cognizant.com/Futureofwork/Documents/code-rules.pdf>, and the book, *Code Halos: How the Digital Lives of People, Things, and Organizations are Changing the Rules of Business*, by Malcolm Frank, Paul Roehrig and Ben Pring, published by John Wiley & Sons, April 2014, <http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118862074.html>.
- ² The Crossroads Model reveals how Code Halos spark new commercial models in a predictable five-step manner to apply and distill meaning from code to outperform competition. For more on the Crossroads Model, please see “Code Rules: A Playbook for Managing at the Crossroads,” Cognizant Technology Solutions, June 2013, <http://www.cognizant.com/Futureofwork/Documents/code-rules.pdf> or our book, *Code Halos: How the Digital Lives of People, Things, and Organizations Are Changing the Rules of Business*, by Malcolm Frank, Paul Roehrig and Ben Pring, John Wiley & Sons, April 2014.
- ³ Arul Aaron Rajamony and Murali Kandan, “Developing a Comprehensive Safe-Driving Program for Teens,” Cognizant Technology Solutions, September 2014, <http://www.cognizant.com/Insights/Whitepapers/Developing-a-Comprehensive-Safe-Driving-Program-for-Teens-codex1022.pdf>.
- ⁴ Gartner Press Release, Dec. 12, 2013, <http://www.gartner.com/newsroom/id/2636073>.
- ⁵ Nathan Golia, “What Esurance’s Sponsored Bracelets Say About Insurance’s Future,” Insurance & Technology, Aug. 5, 2013, <http://www.insurancetech.com/what-esurances-sponsored-bracelets-say-about-insurances-future/a/d-id/1314690>.
- ⁶ Nathan Golia, “Esurance Once Again Taps Wearable Tech for Marketing,” Insurance & Technology, Feb. 21, 2014, <http://www.insurancetech.com/data-and-analytics/esurance-once-again-taps-wearable-tech-for-marketing/d/d-id/1315071?>
- ⁷ Originally designed to control central heating and air conditioning systems, the device is considered smart not only because it allows the user to remotely control the temperature from anywhere since it contains an IP address, but also because it learns the user’s habits and preferences and adjusts the temperature, accordingly. See <https://nest.com/thermostat/life-with-nest-thermostat/>.
- ⁸ IFTTT (If This Then That) is a service that creates powerful connections through simple conditional statements. See <https://ifttt.com/wtf>.
- ⁹ Inova and community physicians focus on promoting wellness, improving patient outcomes through better care coordination and streamlining access to patient information. Aetna supports Inova with technology that makes it easier for physicians to exchange information and track their patients’ care across all settings. For more information on better member experience, see <http://www.innovation-health.com/member-stories>.
- ¹⁰ Michael Kim, Agil Francis, Rohit Gupta and Manish Kumar, “Google Glass: Insurance’s Next Killer App,” Cognizant Technology Solutions, December 2013, <http://www.cognizant.com/insightswhitepapers/Google-Glass-Insurances-Next-Killer-App.pdf>.
- ¹¹ “Google Glass & Wearable Tech Can Transform the Insurance Industry,” Cognizant Technology Solutions, <https://www.youtube.com/playlist?list=PL-Okbzovwrrw5SvNT-5Kput1UyJky9sT2>.
- ¹² Josh Constine, “MetroMile Launches Per Mile Car Insurance And Free Driving Analytics Device,” TechCrunch, Nov. 19, 2013, <http://techcrunch.com/2013/11/19/metromile/>.
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- ¹⁴ Sebastian Herfurth, "Friendsurance," Friendsurance (Presentation delivered at Celent conference on Creative Disruption held at San Francisco), Oct. 3, 2013, <http://www.celent.com/system/files/friendsurance.pdf>.
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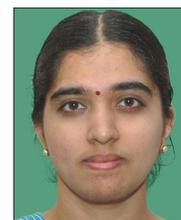
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