Augmenting The Future: The Emerging Role of the Cognitive Insurer

Where Digital Business meets Digital Intelligence

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The Market Dynamics: business and technology trends are moving rapidly on multiple fronts…

- Millennials outnumber boomers 78m to 68m
- 58% want to transact on mobile vs 25%
- Gen Z’s expectations even higher

- NextGen Digital & Mobile Expectations

- 2016 cloud spend of $3.1B is 3% of IT spend
- Leading third start half of app projects on cloud

- Cloud-based Agility & Consumption Models

- Insurance data up 94% from 2015 to 2017
- Firms who excel at analytics & cognitive grew revenue at 1.6X & profit at 2X vs peers

- Explosion of Data, Cognitive & RPA

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- Increased regulatory pressure
- Litigation cost $300B from 2006 to 2015

- Regulation & Fraud Sophistication

- Over 30B connected devices by 2020
- 20-30% consumers will share data on health, lifestyle, & driving habits

- Internet of Things

- InsuranceTech funding from $800M (2014) to $2.7B (2015)
- Emerging platform plays (e.g., Majesco cloud)

- New Fintech & Ecosystem Players

…creating a compelling need for investments in new operating models and capabilities to respond & compete
The Challenge: The explosion of digital and IoT content makes it impossible for humans to make sense of it all

Why Automation is Getting So Much Attention?

Robotics will change:

- 25% employee’s time is spent on repetitive tasks
- 70% cost savings for outsourcing customers
- $5-7T in economic impact by 2025
- 4 out of 5 rules-based processes can be automated
- 10%-30% cost reduction for offshore delivery
- 35%-65% cost reduction for onshore Process Automation

Source: 2015 Everest Group Study and IBM Research
What is Robotic Process Automation (RPA)?

**Software Robotics**
- Computer software which provides a "Virtualized FTE" that can manipulate, operate, and orchestrate other applications, follow business rules, and execute transactions
- More than just a desktop script or macro
- Can execute program API’s and other program objects

**Software Which Mimics Human Actions**
- Teaching "robots" to "drive" applications the same way that a human does through the User Interface
- The "bot" is programmed to follow pre-determined computer pathways between the screen and data repositories, move or populate data between locations, conduct calculations, perform actions and trigger downstream activities

**New Capabilities**
- Instantaneous scalability
- Improvements in speed, accuracy, compliance
- Intelligent automation & auditing
- Creates a virtual workforce
- Continuous improvement

The Automation Opportunity is Even Greater when Combined with Cognitive Augmentation

**Desktop Automation**
- ERP Scripting
- Workflow
- Macros
- Screen scraper
- Auto eMailer

**Robotic Process Automation**
- Extensible and adaptive pre-built process object libraries
- Global robotics command center and dedicated SMEs
- Partner resilient with secured virtualized infrastructures

**Intelligent Process Automation**
- Extend RPA capabilities to address common obstacles of unstructured data and complex rules

**Cognitive Augmentation**
- Autonomous decision-making ("reason and remember")
- New insights and data discovery ("learn")
- Personal and interactive support ("engage")
- Insight-driven knowledge
- Industry-specific virtual assistants

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<th>Simple Transactional Data</th>
<th>Structured Data/Simple Rules</th>
<th>Unstructured Data/Complex Rules</th>
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What is a Cognitive Business?

They can reason, grasp underlying concepts, form hypotheses, and infer and extract ideas.

With abilities to see, talk and hear, cognitive systems interact with humans in a natural way.

Cognitive systems understand imagery, language and other unstructured data like humans do.

A cognitive business has systems that can enhance digital intelligence exponentially.

…..but, what is Watson?

IBM brings the cognitive experience together inside the Watson Ecosystem by using functions modeled on human cognition.
Certain insurance processes are a “natural fit” for Cognitive Augmentation:

- **Sales & Distribution**
  - Benefits Illustrations
  - Compliance Reporting
  - Customer Onboarding
  - Quality Check
  - Quota Assignment
  - Receipting
  - Sales Reporting
  - Scrutiny

- **Risk Selection & Pricing**
  - Behavioral Underwriting
  - Data Entry & Gathering
  - Financial, Location & Medical
  - Underwriting
  - Price Benchmarking
  - Reinsurance Referrals
  - Risk Pricing

- **Policy Admin & Servicing**
  - Automated Reconciliations
  - Contact Info Change
  - Dispatch Tracking
  - Endorsements, Reversals & Cancellations
  - Free Look Alteration
  - Fund Switch
  - Policy Issuance & Printing
  - Premium Redirection
  - Quotation
  - Reinstatement & Renewal
  - Top Up

- **Claims**
  - Automated Data Entry
  - Adjudication
  - Assignment
  - Document Verification
  - Notification
  - Payouts
  - Registration
  - First Notice of Loss
  - Subrogation Assignment

- **Finance, Corp & Shared Services**
  - Bank & Intercompany Reconciliation
  - Invoice Processing
  - New Hire Data Entry
  - Order to Cash
  - Payroll Input
  - Purchase to Pay
  - Record to Report
  - Time and Attendance
  - Request Processing
  - Vendor Invoice Query

Where is Cognitive Computing being used currently?

- **Improved Customer Engagement**
  - Understand customer wants and needs
  - Empower advisors by augmenting insurance expertise
  - Interact in natural language

- **Actionable Insights**
  - Facilitate new products and services
  - Enable sophisticated pattern recognition
  - Leverage untapped data sources

- **Enterprise Transformation**
  - Extract best practices and improve guidelines
  - Automate & augment knowledge-based insurance processes
  - Manage regulatory environment
The cognitive-enabled virtual advisor helps insurers provide better service to customers

**Improved Customer Engagement**

- Improved quality of interaction
- Need-based offers
- Better customer experience & satisfaction
- Decreased contact center workload

**Value Add**

- Natural language interaction
- Empathic & situation-driven
- Never stops learning
- Provides fast, accurate, context-based interactions

**Robo advice and empowered agent**

**Cognitive computing helps insurers predict information in the right context for underwriting**

**Actionable Insights**

- Processes vast amount of unstructured data
- Combines underwriters experience with insights provided
- Acts promptly on emerging trends, identifies issues in real time

**Underwriting**

**Value add**

- More accurate risk assessment
- Comply with guidelines & regulatory requirements
- Continuously learn from best practices
Cognitive systems help insurers manage regulatory compliance and complexity

- Identification of obligations & controls from changing regulations
- Review and management of controls for adherence to regulations
- Solutions for surveillance, AML etc.
- Development and execution of reports and filings required for regulatory compliance

Value add:
- Simplified and effective compliance management & tracking
- Dynamic view into the changing regulatory environment
- Transparency improves across the organization
- Reduces cost of non-compliance

...while we are on the topic of regulatory compliance

OVERWHELMING AMOUNT
of content & constant change

300M pages
of regulations by 2020; 20,000+ new regulations last year

MANUAL PROCESS
error prone and costly

$8B
analyzing regulations, identifying obligations, and determining control requirements

LACK OF HOLISTIC VIEW
results in duplicative controls and costs

$12B
annually managing and updating regulatory controls
To answer the question “Will Cognitive and Automation Replace Human Workers?”, it is important to understand what each excels at....

**Humans excel at:**
- Common Sense
- Dilemmas
- Morals
- Compassion
- Imagination
- Dreaming
- Abstraction
- Generalization

**Cognitive systems excel at:**
- Natural Language
- Pattern Recognition
- Locating Knowledge
- Machine Learning
- Eliminate Bias
- Endless Capacity

**Virtual robots excel at:**
- Obeying Rules
- 24/7 Working
- Endless Repetition
- Consistent Results
- Scalable
- Configurable

A better question: “How can Insurance Carriers remain relevant in this era of rapid technology disruption?”

**Experience**
Create compelling user experiences that are intuitive, functional, and easy to use

**Cognitive Augmentation**
Efficiently find information, answers, concepts and insights based on an understanding of natural language

**Advanced Analytics**
Develop insights and recommendations to deepen customer intimacy or improve business operations

**Benefits of a Cognitive-Enabled Carrier**
- Deeper Human Engagement
- Growth & Development
- Counseling & Mentoring
- Optimized Processes & Operations
- Insight & Understanding
Questions?

Thank you!

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