



BLACKSWAN TECHNOLOGIES

ELEMENT OF INSURANCE

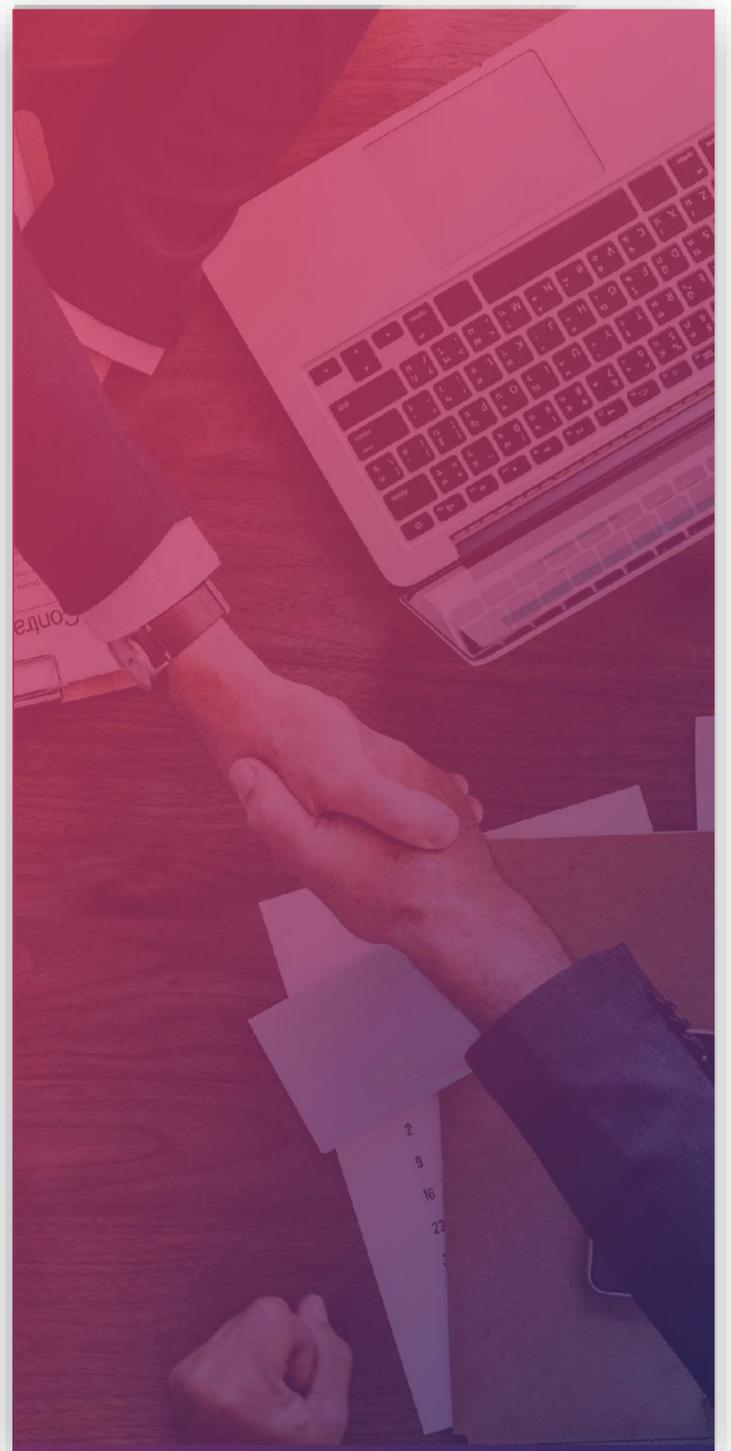
Dramatically Enhance Your Enterprise Intelligence for
Underwriting and Beyond

THE CHALLENGE

Insurance carriers face steady pressures to increase customer acquisition and loyalty, reduce costs, and offer innovative acquisition and customer service business models. Underwriting is playing an increasingly central role by using its actuarial expertise to influence the design of new products, monitor and adapt to risks on an ongoing basis, and encourage upsell of appropriate, additional coverage for customers. Meanwhile, evolving risks in growing markets including natural catastrophes/environmental change and cyber-attacks are creating opportunities and new challenges.

The core underwriting function must address several objectives in this environment:

- Allow information capture from prospective policy-holders to be conducted more quickly and accurately. This requires closer interaction and information support for agents and brokers.
- Access all sources of information, whether internal or external to the carrier, that may impact understanding of the prospects' situation.
- Leverage new analytic models to uncover tell-tale patterns that are not easily discernible by people alone.
- Put tools into policy holders' hands that make them more engaged in risk prevention and insurance coverage modifications.





ELEMENT of Insurance

ELEMENT of Insurance software from BlackSwan Technologies addresses these challenges for underwriting and the business departments and third parties with which it works.

The application is an industry-customised version of **ELEMENT**, the world's first Enterprise A.I. Operating System. **ELEMENT** includes robust leading-edge capabilities in big data, cognitive computing, artificial intelligence and contextual analytics to efficiently translate all the data accessible by your enterprise into actionable insights and customer support. With autonomous insight discovery, powerful situational visualization, and central management of business logic and data integrations, **ELEMENT of Insurance** can start achieving significant ROI in weeks. Now you can achieve the power of the latest A.I. technologies with the quick results from Cognitive Computing Out of the Box. Among the features of **ELEMENT of Insurance** are:



GUIDED DIALOGUE FOR CUSTOMER INFORMATION CAPTURE



A.I.-BASED RISK MODELLING WITH 360° CONTEXTUAL DATA MINING



INSURANCE PACKAGE PERSONALIZATION



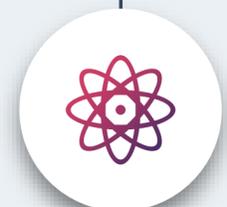
AGENT/BROKER TERMINAL WITH VISUALIZATION



RISK MONITORING FOR CUSTOMERS



BIG DATA



COGNITIVE COMPUTING



ARTIFICIAL INTELLIGENCE



CONTEXTUAL ANALYTICS

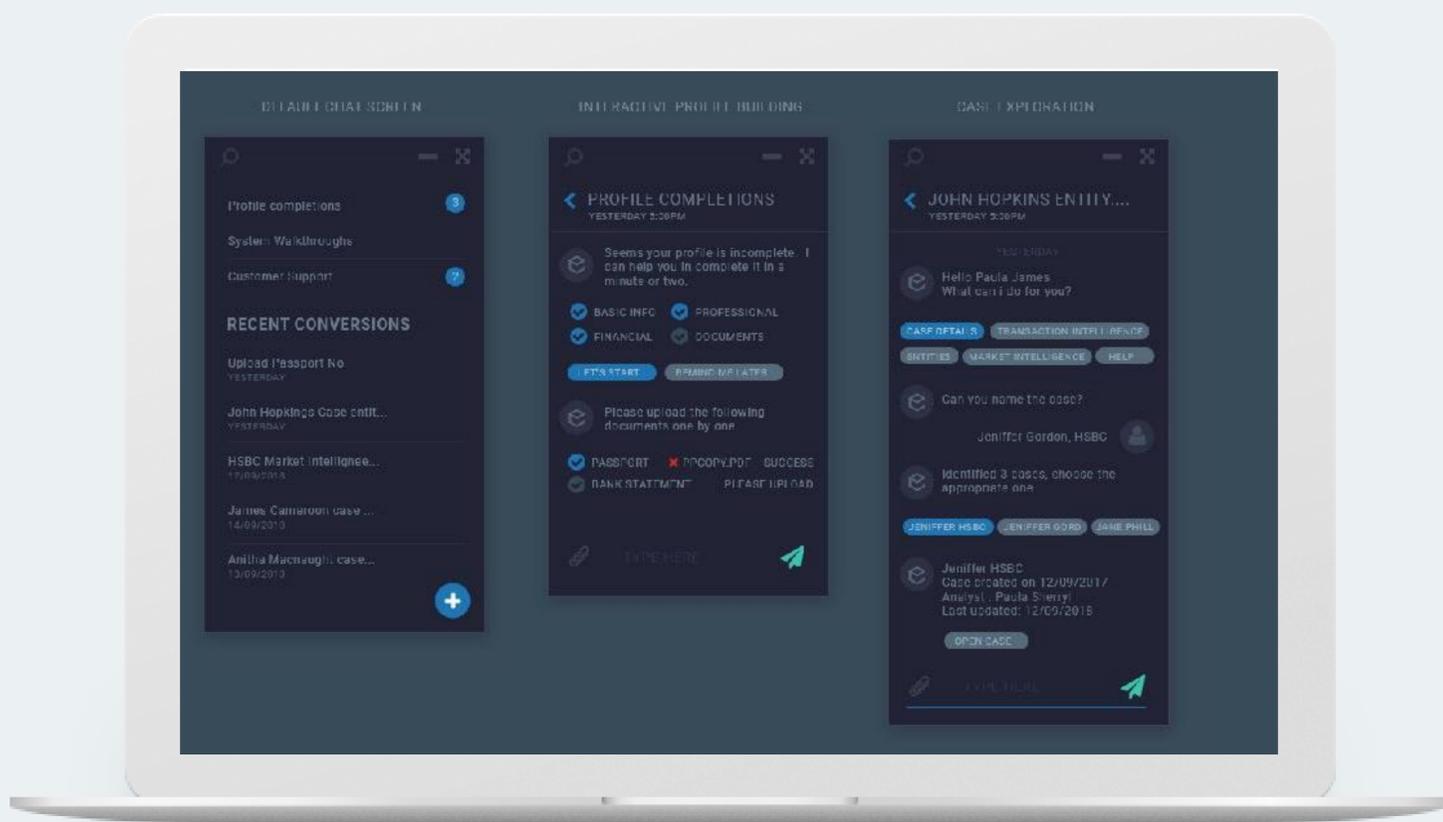


ELEMENT of Insurance

Each major feature of **ELEMENT of Insurance** addresses a specific business activity or role in the customer lifecycle:

GUIDED DIALOGUE FOR CUSTOMER INFORMATION CAPTURE

For policy quotes, customers are looking for the best of both worlds - a human touch for sophisticated interaction, plus automated interaction for efficiency and 24-hour access. **ELEMENT** provides A.I.-based chat interactions (chatbots), natural language processing, and contextual analytics to respond to an inquirer, guide them to provide the pertinent information needed to underwrite the policy, and automatically interpret materials including text documents to understand the inquirer's circumstances. From the agent or broker's viewpoint, "cases" such as new quotes are presented alongside the status of the customer's information compilation and the latest chat transcripts.



A.I.-BASED RISK MODELLING WITH CONTEXTUAL DATA MINING

ELEMENT integrates your traditional, internal data sources about customers and prospects and combines that with unstructured text documents, news and relationship information gathered from public sources, as well as any geospatial and telemetry/activity monitoring data. Our software builds an up-to-the-moment picture of the inquirer's situation, executive staff, relationships with third parties, and pertinent transactions. It then applies machine learning to uncover patterns in that data that could affect one's risk profile, based on comparisons to thousands of similar situations. Deep Learning is the next paradigm for risk modelling, and **ELEMENT of Insurance** makes its insights available to the underwriting team with minimal time investment in A.I./data science ramp up.



Features



INSURANCE PACKAGE PERSONALIZATION

Risk analysis incorporates your corporate underwriting practices as well individually-tailored parameters for the customer's profile to quote all appropriate insurance coverage for the inquirer, and better predict risks and profitability.

AGENT/BROKER TERMINAL WITH VISUALIZATION

Agents and brokers are supported in their interactions with customers through a built-in dashboard. It includes tracking of chat conversations and guidance about required information compilation for underwriting; policy recommendations; and an “at a glance” visual depiction of the most important transactions, external changes, and threats that affect the customer's situation. This information is centralized in a Case Management view, with alerts about changing situations that automatically initiate remediating actions and workflows. Underwriters, agents and brokers also can use hypothesis testing to forecast the benefit to the insured and carrier of mitigating exposures and/or increasing coverage.



RISK MONITORING FOR CUSTOMERS

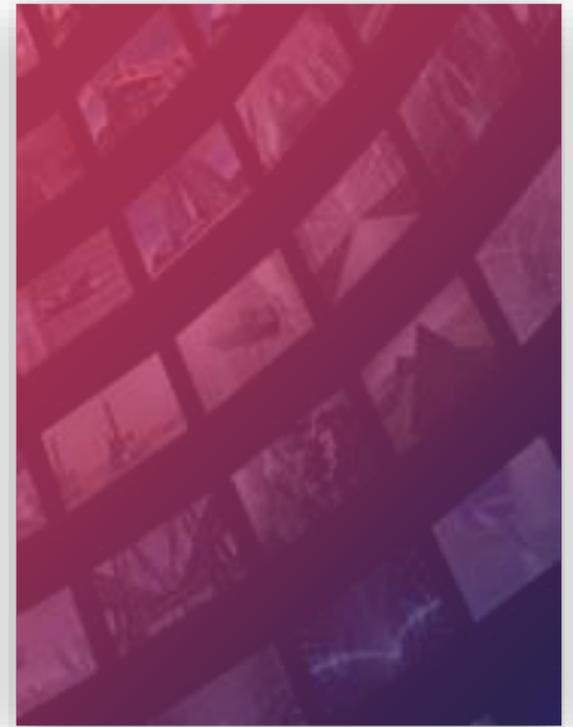
Insured parties are provided online access to a view of their policies, their business profile as reflected in the ELEMENT's situational analysis, and emerging risks to their organisation. This shifts the insurer/insured interaction from a once-per-renewal dynamic, to a value-added service that reinforces customer loyalty.



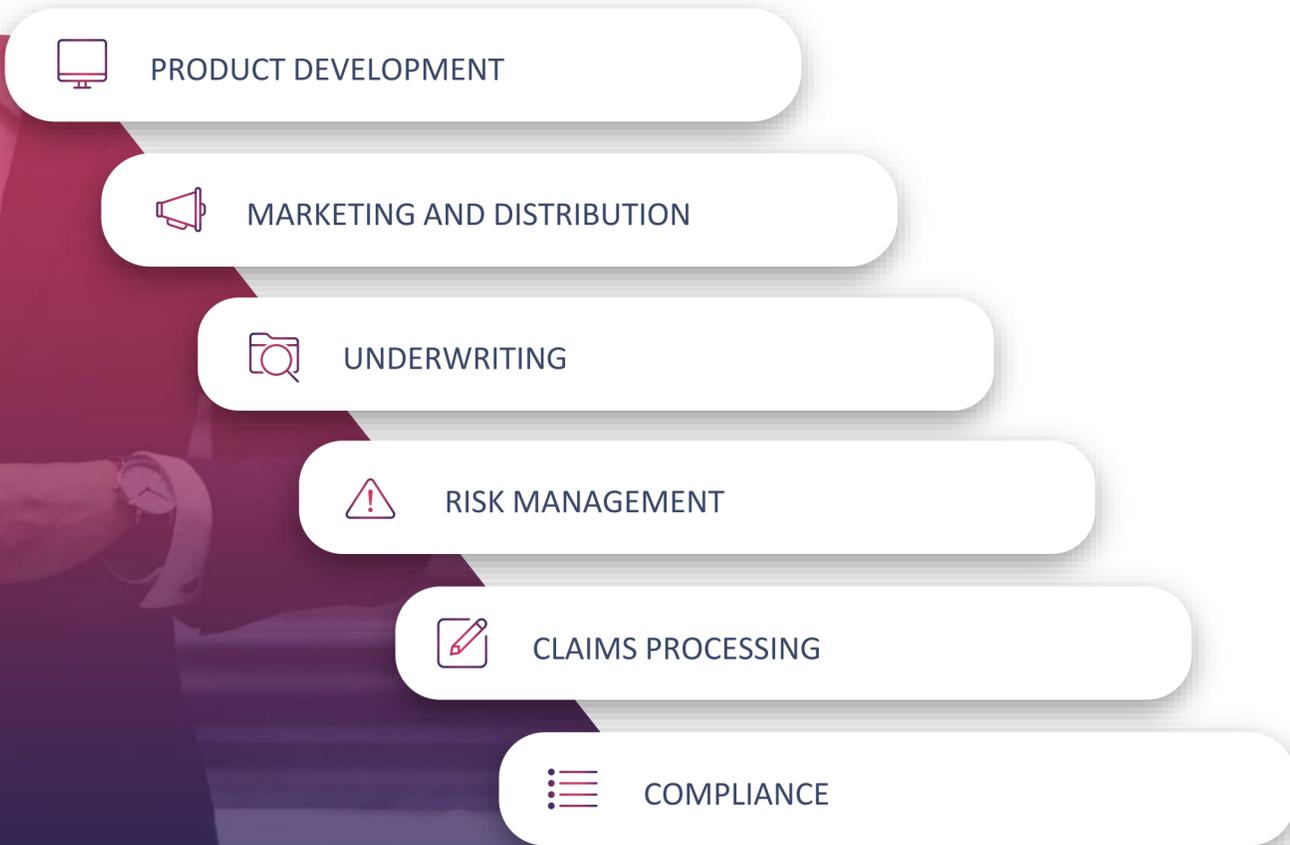
For Your Entire Organisation

ELEMENT encompasses big data techniques to seamlessly integrate with your systems and handle unlimited volumes of data. We use widely-accepted, open data query methods to access your underwriting statistical models, pricing, claims, loss accumulation and financial systems and combine this with relevant information from public data sources (e.g., social media/customer sentiments, adverse news, maps and weather).

The insights from **ELEMENT of Insurance** can be incorporated not only in underwriting and marketing/distribution functions, but product development, ongoing risk monitoring, claims processing, customer service, and beyond. **ELEMENT**, created to be an Enterprise A.I. Operating System, is designed for rapid deployment to one or a few business functions, then leveraged as a comprehensive toolkit for building augmented intelligence capabilities into your enterprise's applications, with minimal need for understanding A.I. and data science.



ENHANCE THE DECISION-MAKING COORDINATION ACROSS ALL CORE INSURANCE FUNCTIONS



SUPPORTS RELATIONSHIPS WITH REINSURERS

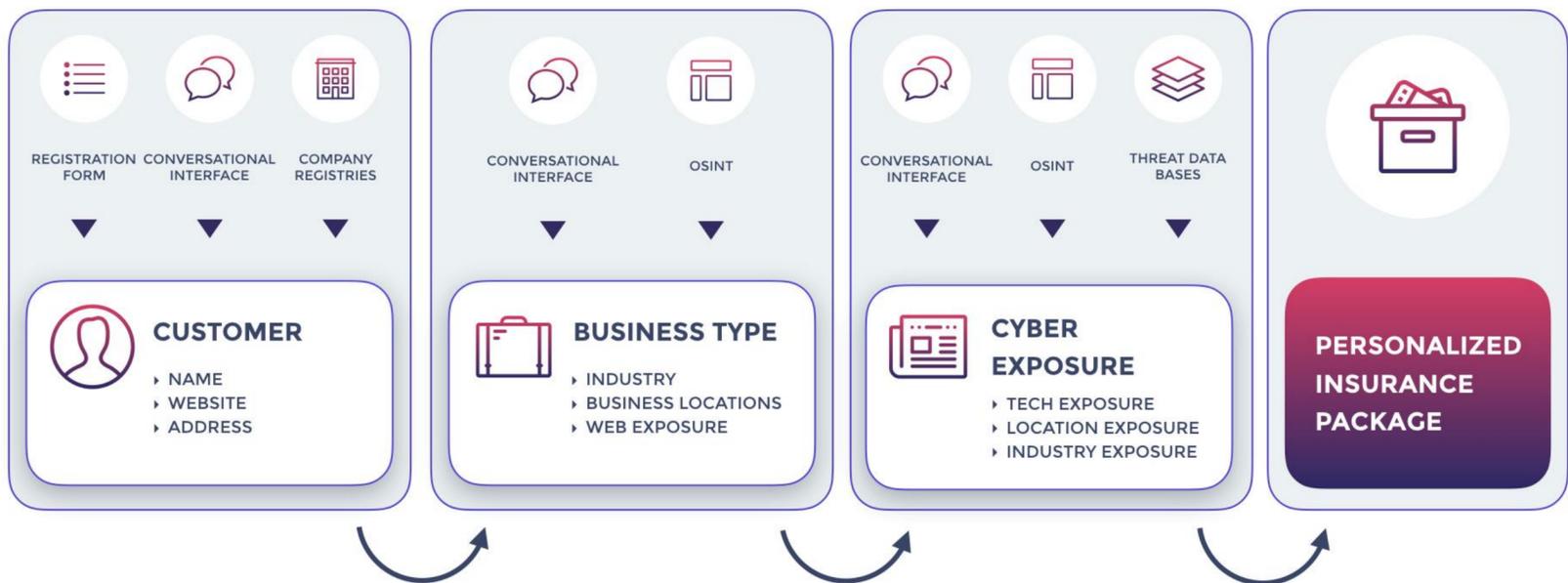
One can identify greater opportunities for facultative and treaty reinsurance when the cedent chooses to share more information about their insured portfolio, risk assessments, and claims, and the reinsurer shares best practices about underwriting and risk mitigation in their areas of expertise. **ELEMENT of Insurance** includes a robust security and access model that supports sharing of data, logic and insights between carriers and third parties including reinsurers.



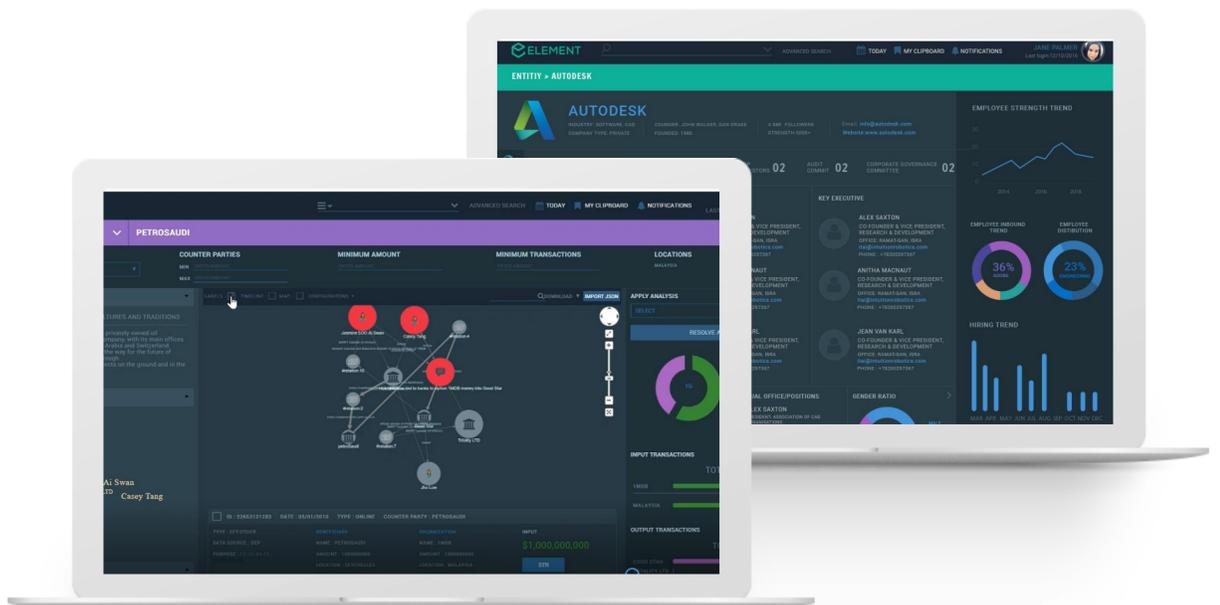
Special Cyber-Insurance Edition

There's also a **ELEMENT for Insurance - Cyber Edition**, which addresses the particular dynamics of insuring against cyber-attacks. This is one of the fastest growing, yet most complex and rapidly-changing sectors in terms of evaluating risk. BlackSwan is well versed at understanding the needs of this sector, given its executives' experience in governmental and commercial intelligence/security operations and technology.

At the heart of this application edition is a Cyber-Threat Intelligence Hub. It first is involved in the underwriting process by guiding the agent/broker and prospect through information compilation about its operational and technological infrastructure as related to digital activities. Data sources used include open source intelligence (OSINT), industry threat databases and geo-locational data, as well as cross-industry, cyber-threat benchmarking. The outcome is a comprehensive mapping of all assets and related entities that impact an organisation's cyber defenses, quantified assessment of risks, and recommendations for personalized cyber-insurance package.



Continuing its utility, the Cyber-Threat Intelligence Hub monitors information about active threats and initiates alerts to the carrier's team and/or customers in real-time. It also learns, post facto, about the impact of attacks across the economy and adjusts its risk and economic models accordingly.



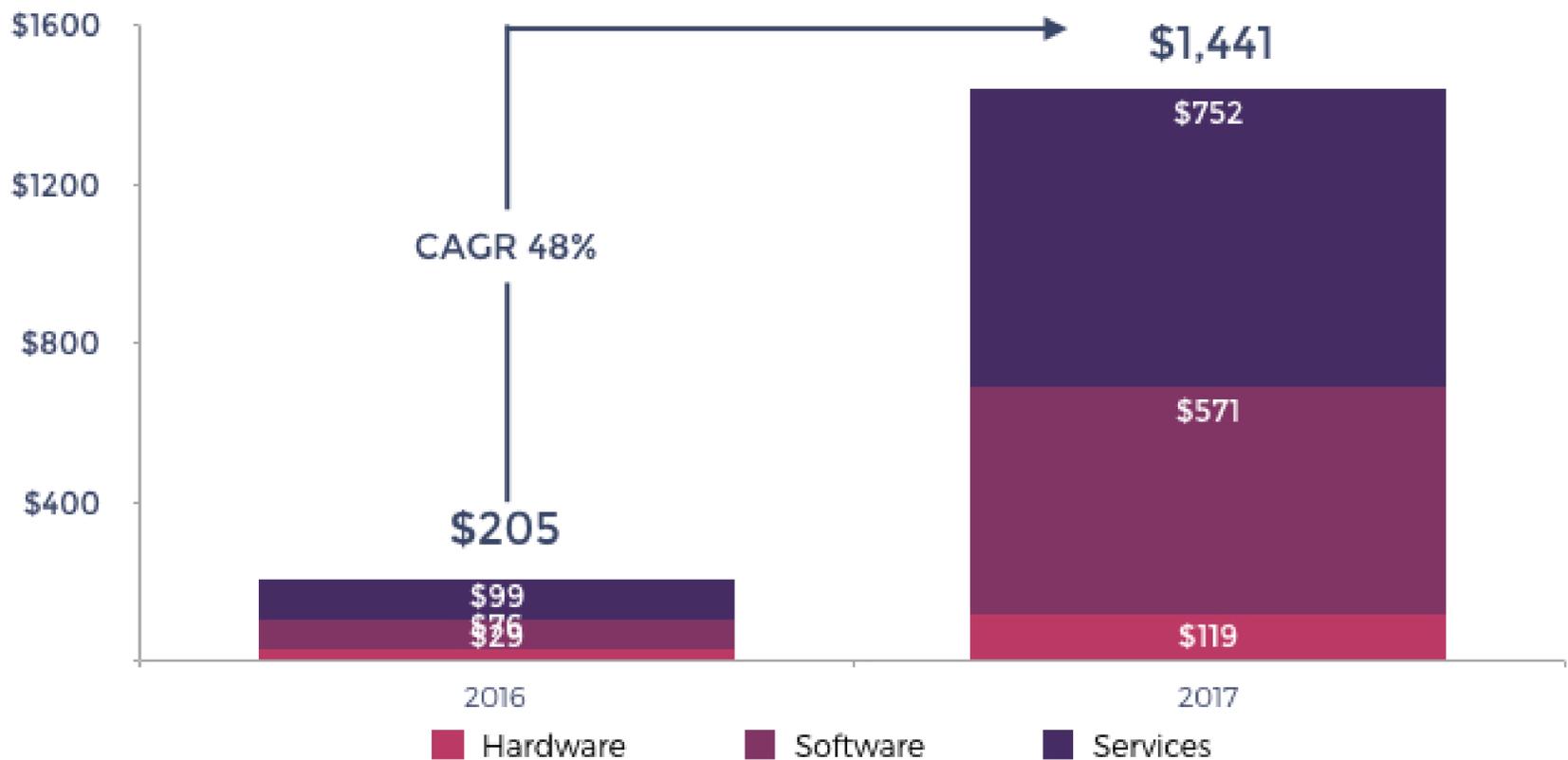


A Revolutionary, Augmented Intelligence Approach to Insurance Underwriting

The insurance environment is changing quickly, from the nature of risk to the new business models and user interfaces posed by insurtech startups and traditional competitors. To achieve and maintain market leadership requires bolder innovation than the business process reengineering and restrictive system integrations common until now. Consider that the research organisation IDC calculates spending in the insurance sector for A.I-related technology and services to be growing nearly 50% per year.

The **ELEMENT** foundation software and the industry-specific **ELEMENT of Insurance** application change the game for deploying big data and A.I. capabilities quickly, serving your customers in exciting new ways, and allowing your enterprise to redefine market leadership

GLOBAL INSURANCE IT SPENDING ON COGNITIVE/ARTIFICIAL INTELLIGENCE TECHNOLOGIES (\$M)



Source: "IDC Worldwide Semiannual Cognitive Artificial Intelligence Systems Spending Guide, 2016H2," published September 2017



ABOUT ELEMENT

ELEMENT is Enterprise Artificial Intelligence Operating System to develop Enterprise AI driven applications centered on the concept of augmented human intelligence. Essentially ELEMENT is the foundation that can be used by enterprises across multiple industries to build robust AI applications & tools that would allow to better collect and organize the necessary information, gain competitive intelligence, improve accountability and compliance, drive new business opportunities and increase the predicting power – all while cutting costs, reducing errors and eliminating waste in a minimal time and effort

- The world first enterprise AI Operating System for the manifestation of data intensive enterprise business applications for operational efficiencies and advanced decisioning
- Multipurpose platform that comes at a significantly lower cost of ownership as compared to the alternatives
- Unique IP and competitive advantage in Cognitive Services, UI, Specific Domain Applications, Data / Knowledge Management and Infrastructure Services
- Bridges the massive gap between isolated, sporadic, expensive Data Science projects to business production with limited time, cost and code.

The system design to operationally serve the spine of any data intensive organization including

- DBAs
- Data Engineers
- Knowledge Workers
- Data Scientists
- Business Analysts
- Business Users
- Executives

Also available are business applications built on **ELEMENT**, which are ready-to-deploy in particular industries and business functions. These include **ELEMENT of Insurance** for insurance carriers, with a focus on underwriting and its coordination with other business functions, as well as applications for marketing, talent acquisition, market intelligence and forensic accounting. This pre-built application approach delivers Cognitive Computing Out of the Box™.

ABOUT BLACKSWAN TECHNOLOGIES

BlackSwan Technologies was founded on the vision that vast, varied data is now accessible to enterprises but is broadly under-utilised. Cognitive computing capabilities can be applied to transform that data into insights that revolutionize your ability to serve customers, improve operations, and redefine market leadership. Introducing the Intelligence of Everything™.

At BlackSwan, a team of more than 40 data science, software development and delivery specialists advances the state of the art in augmented intelligence for businesses – working side-by-side with our clients. Our unique intellectual property spans cognitive services and their industry-specific applications, user interfaces, big data and technology infrastructure management. We have been highlighted in KPMG/H2 Ventures' rankings as a rising star in our field.

BlackSwan serves enterprise-level organisations worldwide, both directly and through an expanding set of blue-chip delivery and consulting partners. The company maintains a primary presence in Europe, the US, Israel and India.