Capture intelligence that matters

HP Information Analytics
Maximizing your ROI (return on information)

Effective business leaders realize that their success hinges on how they address the four Vs of information—velocity, variety, volume, and value—to maximize their return on information. Massive volumes of data are growing at breakneck speeds in diverse formats, but attempts at leverage this immense and strategic resource often fail because businesses lack the technology to understand and effectively utilize the content residing outside structured databases.

Whether it is accessing, monitoring, or analyzing data, or managing and securing it, organizations are challenged on multiple fronts. One of the biggest hurdles is understanding complex and disparate data formats. Beyond structured data stored in databases and enterprise applications, unstructured information generated by humans—emails, documents, video, phone conversations, chats, and tweets—now comprises 90% of all information. Yet, the traditional approaches such as database technologies and keyword and metadata searches that have worked in the past are not designed to optimally analyze and extract actionable insights from complex forms of content. Traditional technologies typically lack the scientific rigor needed to derive contextually relevant and conceptually sound intelligence, which can result in misinterpretations and/or missed opportunities with potentially devastating consequences. Also, unstructured data is often fragmented into silos, preventing you from getting the complete picture.

New technologies exist now that allow you to adopt a holistic approach to your information, based upon proven scientific principles so you can automatically understand the meaning in all forms of content. The ability to understand diverse data gives you a 360-degree view of the vital intelligence needed to drive sound decisions and actions and enables you to work faster and more efficiently.
Being data rich and information poor puts organizations at risk

A range of solutions and capabilities exist today that can help you gain benefits ranging from increased revenues and productivity to the ability to prevent security breaches that put human lives at risk. Without these solutions, you can face an array of challenges, including the following:

• **Voice of the customer and workforce:** Customers interact with your brand via your website, mobile apps, your call center, and by visiting retail locations. They also interact by engaging other customers and prospects on social networks. Each of these interactions is an ingredient in the overall customer experience and each ingredient is important to understanding, and ultimately revealing, the true voice of the customer. Businesses, however, face the overwhelming task of aggregating and analyzing data from all these channels to get the complete picture.

Employees, the most important business asset, interact with the company (e.g. surveys) and with the rest of the world (e.g. Glassdoor, social media). It is equally important and challenging to monitor, access and analyze data from multiple channels for intelligence to enable effective leak prevention, social media governance and capture of the true voice of the workforce.

• **Media monitoring:** The overabundance of broadcast and web-based media sources (e.g., 100 hours of video uploaded to YouTube every minute), can make it impossible to manually monitor and analyze all the information being generated. Language diversity and the velocity of content being produced on the Internet adds makes it harder to effectively use this information.

• **Video surveillance:** One of the biggest challenges of today’s security teams is accurately automating the analysis and understanding of growing amounts of surveillance data feeds gathered every day. The challenge lies in not only reacting, but taking a proactive stance to prevent illicit behavior, based on emerging threats. To meet these demands, a comprehensive strategy that encompasses all surveillance data with the ability to integrate it with operational data is required.

• **Big Data analytics:** The unrelenting surge of data from increasingly complex sources is overwhelming organizations. The pathway to identifying the hidden gems and extracting actionable insight is often laden with resource-zapping, budget-busting obstacles.

• **Healthcare analytics:** In the healthcare industry, information is the difference. Yet critical patient details are unfortunately lost within enormous amounts of free-text medical records being created by health professionals with individual styles and terminology preferences. This scenario renders clinical notes difficult to decipher in a quick and scalable way. The lack of actionable insights hinders how healthcare providers make informed decisions which directly impacts the way practitioners care for patients and do business.

These issues also carry over, contributing to fraudulent insurance claims faced by health insurers, which not only hits the business bottom line, but unjustly drives up healthcare costs for patients.
Solution line-up

HP’s Information Analytics market offering consists of the following solutions:

**Voice of Customer/Workforce (VOC/VOW)**
Our VOC/VOW solution reads and understands virtually all data, including tweets, blogs, call center conversations, CRM data, and more from multiple channels, enabling you to gain the comprehensive insight you need to make customer/employee experience improvements that deliver real business impact. You can also elevate your organization's effectiveness in decision making. For example, you may discover, via multichannel analytics, a combination of the following factors negatively impacting the performance of your marketing campaign, allowing you to take fast action to remedy the situation without losing too much momentum:

- Tweets are indicating that your campaign site is rendering too slowly due to increased traffic which leads to a high rate of abandonment
- Facebook posts reveal that your competitors’ offers are more attractive than yours
- Blog posts by influential customers reflect dissatisfaction with your product
- Call center recordings uncover that your representatives are unfamiliar with the new product and/or campaign offer.

**Media Intelligence**
Automatic live monitoring of broadcast video and audio channels, along with Internet news and streaming video sites, provides valuable media intelligence. You can also leverage the IDOL platform to analyze, cluster, and conceptually search through video, audio, and text repositories. HP Media Intelligence helps you gain instant visibility into breaking stories, as well as deep analysis to identify security threats and competitor moves—in virtually any format and language.

**Video Surveillance**
A truly comprehensive strategy allows you to encompass all surveillance data and integrate it with operational data. The ability to identify and respond to security threats by intelligently analyzing across multiple video, audio, and text based data sources gives you the ability to automatically flag threats and patterns of unusual activity.

**Big Data Analytics**
The ability to tame and extract value from all forms of information in real time at scale allows you to improve efficiency, reduce risk, increase revenue opportunities, and lower costs. Big Data Analytics removes the irrelevant noise that comprises so much of digital content and presents you with relevant data that is actionable. The IDOL platform extracts key concepts and context in information, and increases the value of data by finding relationships, trends, and issues as they develop. We help you solve a wide range of information challenges, including talent management, fraud detection, insurance risk, social media analytics, traffic management, and healthcare analysis.

**Healthcare Analytics**
When clinical users can perform automated conceptual search on structured and unstructured data, this widens the pool of usable information, allowing you to include demographic information, diagnoses, labs/meds, and free-text clinical narratives (admission notes, progress notes, discharge summaries, consultant reports). You can identify patient cohorts based on patterns in co-morbidities, clinical findings, anatomical references, procedures, and many other data dimensions to make better healthcare decisions.
“Valuable sources of customer VoC data are plentiful, ranging from survey results to social-media dialogues...but traditional, siloed analytics...inherently limit opportunities to understand how customers feel.”
—Jim Davies, Gartner Research

Solution benefits

**Voice of Customer/Workforce helps you to:**

**Turn insight into results:** Extract valuable insights from virtually any data sources, by understanding key concepts and relationships held within data from all types of customer/employee interaction.

**Identify patterns and sentiment:** Extract concepts and meaning to deliver real contextual insight from unstructured, human data that exists in contact center recordings, tweets, blog posts, Facebook comments, online product reviews, and verbatim answers from open-ended customer or employee survey questions. Analyze and organize data, based upon patterns and sentiments. Automate manually intensive processes to accelerate intelligence delivery for fast and well-grounded decisions and actions.

**Create informed, compelling experiences:** Empower business users with a flexible system they can use to get directly involved in making changes to optimize processes so you can react to new opportunities or changes in external market or internal organizational dynamics.

**Media Intelligence helps you to:**

**Access all media sources in one place:** Our single enterprise-grade platform that brings together all open media sources: TV, radio, web, social. This allows you to monitor and analyze from one user interface.

**Monitor media 24 x 7:** Monitor and react to events without missing critical pieces of information across a wide range of media sources.

**Perform intelligent analysis:** Advanced analytics capabilities, based on IDOL, allow you to derive a broad range of insights: audio analysis (speech-to-text, speaker identification), video analysis (key framing, key frame detection, face recognition, logo detection, and text recognition), and text analysis (clustering, segmentation, entity extraction).

**Deliver comprehensive results:** Flexible report production and delivery to fit any vertical specific workflow, including video clips, images, and transcripts.

**Video Surveillance helps you to:**

**Get comprehensive surveillance from all sources:** Our enterprise-ready design offers massive scalability, and support for video, audio, and text data streams from a large variety of sources to create a common understanding of information.

**Perform intelligent industry-leading analytics:** Perform analytics on video and audio feeds such as intelligent scene analysis to detect what is happening in a scene, get accurate vehicle license plate recognition and face recognition, identify objects in a scene, and perform audio analytics to detect sounds such as gunshots.

**Create holistic situational awareness:** Automatic setup and event alerts allow you to combine structured and unstructured information for a more complete picture.

**Perform comprehensive forensic analysis:** An intuitive, web-based UI enables easy playback of video and audio for investigation, as well as quick production of reports.

**Big Data Analytics helps you to:**

**Turn data into insight:** Extract valuable insights from data and understand key concepts and relationships within all types of data, including social media, video, audio, and clickstreams.

**React quickly to emerging trends:** Detect developing patterns, sentiments, and intentions to stay ahead of the competition.

**Scale to Big Data:** Process massive datasets with speed and reliability and react quickly to changing business environments.

**Augment the Hadoop ecosystem:** Perform advanced analytics for information stored in Hadoop, ingest Hadoop data into IDOL for advanced retrieval, and push enterprise documents into Hadoop for MapReduce analysis.
Healthcare Analytics Solution helps you to:

**Find meaning in your unstructured data:** A large portion of clinical records are unstructured, free-text notes which cannot be searched without manual review of each document. As a result, unstructured clinical data cannot be leveraged for comprehensive accurate reporting and analytics. Now you can be preventative in your healthcare delivery by leveraging IDOL and curated medical taxonomies to harness, understand, and use data in an effective and scalable way.

**Gain actionable insights:** With a powerful analytics solution that makes sense of your unstructured clinical data, the possibilities are endless. For example, you can identify comorbidity, pharma, or procedure concepts that correlate with a marked difference in readmission rate. With the automated process and high performance analytics engine, you can put time back on your side. The potential to detect complications while a patient is still in the hospital, or discover trends in medical cases, is an invaluable game-changer.

**Save time by automating manual processes:** Manual chart reviews can be labor-intensive, expensive, and sometimes, unreliable. With HP’s Healthcare Analytics solution, you get a powerful, user-friendly solution to support your administrative needs.

**Conclusion**

HP’s Information Analytics solution derives contextually relevant concepts from within information and uses it to deliver comprehensive business intelligence to minimize the risk of missed opportunities. It offers a holistic approach for secure and automated monitoring, accessing and analyzing virtually any data regardless of origin, type, and format. It works for businesses and public agencies that want to improve decision-making, operational effectiveness, and organizational efficiency. It achieves these objectives by simplifying value extraction from both internal and external information assets in the face of increasing data volume, velocity, and variety.

**About HP Autonomy**

HP Autonomy is a global leader in software that processes human information, or unstructured data, including social media, email, video, audio, text and web pages, etc. Autonomy’s powerful management and analytic tools for structured information together with its ability to extract meaning in real time from all forms of information, regardless of format, is a powerful tool for companies seeking to get the most out of their data. Autonomy’s product portfolio helps power companies through enterprise search analytics, business process management and OEM operations. Autonomy also offers information governance solutions in areas such as eDiscovery, content management and compliance, as well as marketing solutions that help companies grow revenue, such as web content management, online marketing optimization and rich media management.

Please visit autonomy.com to find out more.