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OUT OF THE (BIG) BLUE: WILL NEW TECHNOLOGIES CHURN BIG DATA?

Financial firms should take note. Building on the Hadoop™ project from the Apache™ Software Foundation to process large data sets in parallel, IBM announced its big move to "Big Data."

*1. <u>**Unstructured structure**</u>: Big Data analytics will rein in a flood of unstructured data that rides on free text, visual, and audio content from live feeds such as twitter, facebook, Google+, and pinterest.*
→ **Actions**: Firms should understand public sentiment on-the-spot, harness relevant traits, and take charge for productive gain. Innovative customer models will reflect social media profiles, psychographic drivers of motivation, behaviors and intent to buy. Advanced analytics, mapping and tagging will interpret pervasive multimedia data, thus turning insights into to action and tangible outcomes.

*2. <u>**Divide and conquer**</u>: As Big Data becomes unwieldy, the Hadoop framework deconstructs large computing challenges into smaller chunks that run concurrently in multi-processor and cloud platforms.*
→ **Actions:** To capitalize on the data tsunami, firms will need to retool for parallelization and beyond. Making sense in real-time, and with low latency, out of vast amounts of continually mutating data will pose significant integration challenges. New platforms should bring advanced knowledge and visualization tools that transform the interactions between humans and computers.

*3. <u>**Insights in sight**</u>: What makes organizations smarter? IBM studies show that top performers are much more likely to use business analytics, which are seen by most firms a source of competitive advantage.*
→ **Actions:** We believe that smart firms will surface innovative business opportunities by soaking up the flood of information and synthesizing more holistic and timely insights. Such insights should unify diverse structured, unstructured, and ambiguous data into business domain semantics. Executive teams must sponsor the development of cohesive models that drive enterprise-wide alignment and execution.

*4. <u>**Learning through hypotheses**</u>: Triumphant from a "Jeopardy!" contest, IBM Watson seeks to improve business and society. Reasoning and learning may thrive in a new generation of Big Data technologies.*
→ **Actions:** IBM Watson is being trained to interpret natural language, generate hypotheses, adapt and learn. For example, banks may teach Watson subject matter knowledge and employ smart analytics to improve customer interactions and profitability. Similarly, investment firms may apply these technologies to empower better and faster decisions in retirement planning or institutional trading.

*5. <u>**The promised value of computing**</u>: Professionals will become more data savvy. Individual business roles will ride on functional insights from Big Data to create new fields of economic expansion.*
→ **Actions**: We find that the proliferation of social media, digital information sources, and crowd-sourcing methods will empower consumers much further. Facts and statements may rapidly gain popular sympathy and go viral. Minding privacy and information security issues, firms should reap the economic potential of advanced approaches to information dissemination, gathering and analysis.

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