

# Outsmart your video competition with Watson

How advances in cognitive awareness promise to redefine video industry economics

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Creating economic value and sustainable growth in a disrupted video industry seems more daunting today than it has in a long time. Challenges to once-immutable delivery platforms, erosion of longstanding business models and unprecedented competitive pressures are challenging even the most adroit managers to achieve their business objectives while the game literally shifts underfoot.

Into this turbulent environment, a new actor promises to deliver game-changing economic efficiencies coupled with an injection of financial growth. It's the breakthrough concept known categorically as the cognitive system, which departs sharply from prevailing computing in three critical areas:

- **Understanding.** Cognitive systems understand like humans do.
- **Reasoning.** Cognitive systems can understand not just information but the underlying ideas and concepts behind it.
- **Learning.** Cognitive systems never stop learning.

As a leader in cognitive systems development with its Watson initiative, IBM believes these attributes are poised to redefine a wide range of businesses. And others agree. “Watson may be a potent way for businesses to tap into advances in machine learning and (artificial intelligence),” said MIT Technology Review in an October 2016 review.<sup>1</sup>

In the video industry specifically, Watson may have an especially important role to play. In part, this is because video depends on vast troves of information. The presence of fine-grained content indicators that change moment-by-moment and scene-by-scene creates an enormous reservoir of identifiable data that can be examined and interpreted at tremendous scale, with implications both for operational agility and for audience appeal. Similarly, information the video industry possesses about audience interactions and behaviors invites deeply revealing intelligence that can be transformed to business objectives. Finally, even on the day-to-day operational front, Watson can be leveraged to produce process improvements that power margin-improving logistics efficiencies and liberate managers to focus on new opportunities.

Here's a summary of some of the business benefits Watson makes possible within the video industry:

## – Higher advertising CPMs, Part 1

Watson enables richer presentation of advertising opportunities to sponsors and advertisers than has ever been possible. It allows advertising-supported networks, stations and video aggregators to move beyond the relatively blunt instruments of today's marketplace – generalized network brands, program-based advertising insertions and coarse demographic categories – and into a more granular offering in which knowledge of actual moments and scenes within programs creates improved synchronization between content environments and advertising messages. A precision alignment of brands and advertising messages with the actual content appearing on the screen promises to better engage audiences and deliver improved value to advertisers, translating to improved advertising economics for sellers.

## – Higher advertising CPMs, Part 2

Related in this subject area is Watson's ability to deliver on a longstanding yet elusive promise of video advertising at large: dynamically aligning advertising messages with viewer characteristics and interests. The key word is “precisely,” because Watson allows for much more nuanced understanding of who viewers are and what interests them than current estimation technology permits. Drawing on a wide pool of contributors including social media exchange, language/intonation and other expressions of human character, Watson transcends current techniques that simply attempt to create broad associations between products and viewing patterns. As a result, the value of targeted/dynamic video advertising inventory can rise beyond what today's less-sensitive indicators permit.

## – Video personalization that's truly personal

Many of the instruments used today to align content with viewer tastes and preferences – program “likes,” thumbs-up indicators and broad genre comparisons – are

relatively unsophisticated, and occasionally tend to veer off course. Watson has great promise in this area because it's able not only to evaluate real-time information, but to get smarter over time. This ability to respond nimbly to world events, customer preferences and external indicators empowers industry participants to make business decisions that elevate relevance to audiences. That means higher satisfaction, improved usage, lower churn, better modeling of viewer behavior and smarter decisions around content creation, content acquisition, marketing and advertising.

**– Faster access to indexed content**

As the volume of video content grows exponentially, the time it takes human editors and curators to index, catalog and locate content becomes untenable. Watson transforms the indexing/cataloguing/metadata-tagging challenge from a manual and labor-intensive process to a rapid, automated sequence that enables fast, accurate identification and selection not just of video programs or episode titles, but specific scenes or points of relevance within videos. For video news organizations or any content providers that maintain vast libraries, Watson presents broad efficiency improvements that unlock profitability.

**– Improved transcription and captioning**

Mechanical processes that have been used for generations to manually transcribe, caption and otherwise translate spoken content into text demand significant investments in time and expense. Watson takes over this workload rapidly and cost-efficiently, enabling professionals to spend more time on creative processes than manual data entry.

**– More accurate compliance monitoring**

Similarly, Watson builds on its language translation/transcription abilities to liberate editors and entire staff teams from the burden of manually reviewing content for illicit or disallowed material. Watson digests visual, audio and contextual information to learn over time, enabling increasingly accurate content policing. Here again, savings in staffing costs and improvements in accuracy produce immediate and lasting margin improvements.

**– Highlights, in (near) real-time**

Increasingly, a differentiator of value in the world of video content is immediacy. Sports networks, news organizations and content creators that aim to deliver rapid, high-volume turnaround of highlights, clips and content summaries can optimize their initiatives by tasking Watson to intelligently analyze content and come up with summary highlights that engage audiences according to any selected emphasis. The creation and display of clips in near real-time presents a watershed leap forward in the way “live” video is summarized and displayed.

In each of these areas, Watson arms industry participants with newfound prowess that can deliver competitive advantage. Being able to better describe and present content, to deliver best-in-class alignment and personalization, and to learn over time about audience tastes and preferences renders qualities of differentiation that are critical to standing out in a competitive video marketplace where there is a persistent danger of gravitating to formulaic, lookalike products. Even the earliest trial implementations suggest a new leap forward in the way video content is presented, the way audiences engage, and the way industry participants achieve their business objectives.

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Footnotes

1 IBM's Watson Is Everywhere— But What Is it?, MIT Technology Review, October, 27, 2016, <https://www.technologyreview.com/s/602744/ibms-watson-is-everywhere-but-what-is-it/>



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