RUZIVO

WHITE PAPER

Why Media Intelligence Companies Should Take Advantage of Automation

RAPIDLY CHANGING ENVIRONMENT

Rapid changes in technology and analytics are shaping the media monitoring landscape, providing new opportunities for media analysts and experts from the world's largest media intelligence companies. These companies are poised to provide a richer understanding of consumer behavior both offline and online as the technology continues to advance, harnessing things like artificial intelligence (AI), analytics, automation, and machine learning.

As houses of media expertise, from traditional to digital (including mobile and social), advertising companies have developed the tools, passion and understanding to deliver custom responses to their clients' critical challenges. However, rising costs coupled with an uneven adoption of technology pose the risk of advertising companies falling behind. McKinsey[1] reports that economic growth over the last 50 years has been driven by both a growth in productivity and in labor supply—the latter of which is set to slow dramatically with recent demographic factors such as aging and lower birth rates. An increase in productivity, therefore, is essential for media companies to maintain growth within the changing economy. Based on scenario modeling on the macroeconomic level by McKinsey, automation alone is estimated to raise productivity growth on a global basis by 0.8 to 1.4 percent annually. Within the process driven environment of media intelligence, automation is crucial to achieve productivity increases and thrive in today's business market.

To really understand the value of automation within media monitoring it is important to realize the dramatic evolution of the media landscape within the past decade or two. In today's market, media and advertising campaigns have increased at a rate where traditional manual processes are struggling to keep up with the scale and speed of campaigns today.[2] Advertising and media intelligence business leaders should seek out opportunities to utilize automation if they want to be able to implement processes customized to their specific needs and maintain the continuity of their work. Technology investment in AI, machine learning, and automation is needed for business growth and survival, as organizations are facing rapidly changing environments that require company transformation.

EMERGING TECHNOLOGIES IN AUTOMATION AND AI

Media intelligence can benefit from an array of emerging technologies in the field of AI and automation. Processes such as deep video analysis, translation, transcription, and tagging are transforming the field of video insights and media monitoring.

One way that automation is essential for the future of media intelligence is in the changing environment of content management towards "machine driven indexing, metadata-tagging, and cataloguing".[3] What was once a laborious manual process requiring significant resources is becoming completely automated. While primarily applied in media distribution, media intelligence leaders who take advantage of this changing environment stand to benefit from increased productivity with fully automated workflows. Deep video analysis is being shown to increase content taxonomy as machine learning can "figure out" things such as locational references and object recognition.

While video analysis is just one way that machine learning and automation can improve business models in media intelligence, it is nevertheless an important one. As a complex and information-intensive media, analyzing video has long been a struggle for computers to satisfactorily master.[4] However, such recent improvements in deep learning techniques make staying at the forefront of this developing technology an exciting place to be.

Beyond video, machine learning has the capability to take in data from all forms of media, including print, online and broadcast, in order to reveal patterns and trends within the data and specific fields. Topic forecasting, anomalies in patterns, and predictive analysis are among the benefits of using machine learning with media monitoring. The incredibly large volume of all forms of media make individual and manual processes unsustainable, let alone receptive to large-scale trend analysis. Custom reporting provided by automation provides media intelligence companies the capability to narrow in on the data that matters to each individual company and view the patterns and big picture data view of relevant information.

For media intelligence leaders, the ability to successfully adopt these technologies can prove to be the key difference in a competitive market. Automation not only has the edge on gains from labor substitution but also with the ability to "enhance productivity, raise throughput, and improve predictions, outcomes, accuracy, and optimization."[5] Machine learning will provide answers to problems that would otherwise remain hidden, changing businesses from being reactive into proactive organizations.

MACHINE LEARNING AND AUTOMATION WITH RUZIVO

With fifteen years of experience in the media intelligence industry, Data-Core has witnessed firsthand how the media landscape has changed within the past few decades. In light of the necessity of machine learning and automation in today's market, Data-Core has appropriately pinpointed how to provide cutting-edge services for business leaders looking to capitalize on these new technologies. The world of technology is changing quickly, but there are those who are at the forefront. RUZIVO, Data-Core's Automated Media Intelligence platform is one of the first in the industry and is able to reduce human resource requirements by a half to two thirds.

RUZIVO provides media intelligence for Broadcast TV, Internet-based media, Newspaper, Magazine, and Radio in a multiplicity of languages, while taking advantage of emerging automation and machine learning technologies. This is done through a multi-step process that includes Segmentation, Classification, Mapping/Matching, Attribution and Analytics of advertisements by Industry Groups or by other client-determined classes.

Segmentation

Used for print and broadcast media, segmentation has always been a manual process. However, RUZIVO has automated the process by making use of machine learning technologies that increase accuracy and decrease time and cost. RUZIVO's segmentation process includes marking the start and end points of radio clips and images for broadcast and print media. The automation of segmentation allows for the fast and accurate results as boundaries are marked within radio, ads are delineated from frames in TV media, and images are marked and extracted from print ads.

Classification

Classification involves the process of determining if an image or video is in fact an ad. After being classified as either ads or non-ads, all media types are run against an archive to determine if there are duplicate ads. An important step, duplicate ads are mapped while new ads are classified into categories according to industry, type and any other specifications requested by the client.

RUZIVO's automation of the classification process has greatly reduced the notification time needed to make clients aware of any new advertisements within the categories they have requested. Within the automated process, ads are immediately identified and a check is run for duplicates of all ad types.

Attribution

The first part of the automated attribution process is annotation. Annotation is the extracting of text from the ad. Ads can also be mapped by headlines and taglines if necessary. Detailed attributes are then captured. In addition to a manual summary option, RUZIVO offers automated transcription that provides verbatim text. For online and print ads, headlines and taglines are identified and extracted. The next step for all types of media involves the capture of detailed characteristics and finally the accurate transcription of ad text.

Quality Review & Analytics

Data-Core is focused on maintaining a superior level of accuracy with the RUZIVO platform. Because human supervision of all machine learning and automated processes is essential in such an emergent technology, the quality review process is manual to ensure accuracy of results and can be done at any level, dependent on the clients' requirements. We believe that the marriage of human and machine has the potential to ensure the most accurate and innovative results.

RUZIVO's quality review ensures that initial processes are run, classifications are verified, and ad attributes are validated. After the data has gone through the quality review process, all data is brought together and the client has the ability to run custom reports. With RUZIVO's clear, powerful dashboards, the information is easily interpreted and presented.

Throughout the entire media intelligence gathering process, Data-Core has ensured that the RUZIVO platform incorporates cutting-edge machine learning and automation approaches that revolutionize how media intelligence operates. RUZIVO pushes the boundaries on what media intelligence can be and encourages business leaders to learn more from the information they are receiving.

Data-Core has established a strong ongoing working relationship with their clients by consistently delivering accurate results on time. They are excited to now introduce them to the latest technology, allowing them to further their Core Business functions and achieve significant cost savings, leading to the opportunity for substantial growth without the corresponding increase in manpower.

EXCITED FOR THE FUTURE

Machine learning and automation are not new ideas. However, the world is entering a point in time when technological advances in AI and the pace of breakthroughs is growing rapidly.[6] These technologies are becoming increasingly accessible and reasonable to employ. Businesses that are able to take advantage of and successfully implement them have the potential to differentiate themselves from competitors or increase business output.

Within the field of media intelligence, the same applies. Machine learning and automation is an invaluable tool for an industry that always needs to stay on top of modern media landscapes and changes in the field. It is an exciting time to witness the growth of these technologies and to embrace what they have to offer today.

---

[1]https://www.mckinsey.com/global-themes/digital-disruption/whats-now-and-next-in-analytics-ai-and-automation

[2]https://www.techemergence.com/machine-learning-for-media-monitoring-with-signal-chief-data-scientist/

[3]http://www.mediaentertainmentinfo.com/2017/09/top-10-areas-artificial-intelligence-is-leading-automation-in-media-industry.html/

[4]https://www.microsoft.com/en-us/research/publication/deep-learning-intelligent-video-analysis/

[5]https://www.mckinsey.com/global-themes/digital-disruption/whats-now-and-next-in-analytics-ai-and-automation

[6]https://www.mckinsey.com/global-themes/digital-disruption/whats-now-and-next-in-analytics-ai-and-automation

RUZIVO makes use of Machine Learning in order to provide quality data related to media consumption, performance and value in a cost effective manner. Data-Core's focus is timely and accurate delivery to the client. These goals are made possible due to RUZIVO's automated, cloud based, state-of-the-art, 24x7 operation.