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FROST & SULLIVAN BEST PRACTICES AWARD

SURVEILLANCE ANALYTICS SOLUTIONS - NORTH AMERICA

Technology Innovation 2019

BriefCam

FROST & SULLIVAN

2019 BEST PRACTICES AWARD

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As the Internet of Things (IoT) infiltrates every aspect of organizations' daily operations, the already massive amounts of video data is growing exponentially as many security cameras record 24 hours each day, 365 days per year, burdening video analysts. Traditionally, businesses required security teams to review and analyze video footage manually, which consumed days and months of their valuable time. Currently, the security industry does not employ enough people to examine all of the available footage; thus, it is impossible and inadequate to leave humans to analyze surveillance video without technology to aid their efforts. Since cameras record 24/7/365, the lack of human capacity and the vast volumes of information leave a considerable amount of video data unexamined by operators. Furthermore, huge amounts of data is presented to analysts in a single video (let alone thousands of videos), which often offer more information than humans can notice, understand, or link to other video footage. Therefore, operators need technologies that can discover and display all the collected data, the connections between that information, and what that data means by providing context.

With recent advancements in the video surveillance space, technology can complete much of this tedious work for security professionals; remove the human error factor; and alert operators to incidents, and drive further value from the video content itself. The security solutions industry has enhanced surveillance analytics technologies, but many events still go unnoticed or require operators to review hours or days of footage to observe and track individuals or objects, which delays investigations significantly. While technology vendors offer video analytics solutions that provide better situational awareness, many do not provide the comprehensive and granular filter options that organizations require to detect and track objects or individuals in security incidents.

Video analytics vendors often require companies to employ rip-and-replace strategies as their technology only integrates with specific brands. Companies are hesitant to invest in such solutions as rip-and-replace processes reduce operational uptime and come at a significant financial cost, causing organizations to wait years to receive a return on investment (ROI). Furthermore, many video analytics vendors provide only a few features and capabilities—e.g., facial recognition or license plate recognition—rather than a comprehensive suite of solutions to meet organizations' needs, requiring companies to purchase technologies piecemeal from various sources. A vendor that can combat these industry challenges while providing clients with superior situational awareness and investigative capabilities will prevail in the surveillance analytics solutions industry.

Technology Attributes and Future Business Value of BriefCam

Founded in 2008, BriefCam® leverages in-depth knowledge and extensive expertise in video analytics to offer clients superior video investigation capabilities, situational awareness, and quantitative analysis, which improves safety and security and operational efficiencies for an organization's properties, assets, and employees. The company's next-generation Video Content Analytics (VCA) solution allows operators to search, quantify, and act on video surveillance data with cutting-edge video analytics. BriefCam serves global customers in industries such as education, healthcare, law enforcement, retail, safe and smart cities, stadiums and events, and transportation.

Industry-leading Video Analytics Technology

BriefCam's VCA platform analyzes an organization's video data to detect, track, extract classify, and catalog men, women, children and vehicles with speed and precision, using 27 classes and attributes, face recognition, appearance similarity, color, size, speed, path, direction, and dwell time. The company's scalable and flexible solution enables clients to achieve better situational awareness and accelerate investigations and enable data driven decision making. Moreover, the platform allows users to create cases and manage pertinent information—e.g., video of persons or objects of interest—and enables operators to collaborate with other organizations to solve security incidents.

The company's solution offers search filters that many competing solutions do not or cannot provide, enabling customers to view video footage in real time or on-demand to identify people, faces, objects, attributes and behaviors. With BriefCam's technology, clients can simultaneously present objects that have appeared at different times within the video. The result is a dramatically shorter video segment that fully preserves the viewer's ability to analyze the scene, enabling the review of hours of video in minutes and sometimes seconds. For example, if an operator applies filters for females in red shirts wearing a black backpack traveling south on a bicycle between 1:00 pm and 4:00 pm, they can view footage of all the individuals meeting that criteria into a video just minutes long—including a timestamp of when the object was identified above each person or object. BriefCam calls this patented technology VIDEO SYNOPSIS®. When combined with deep learning and computer vision it provides customers with a revolutionary solution that increases productivity, safety, and security.

With the company's solution, operators can easily and quickly search and view all footage with an individual, animal, vehicle, or object across multiple cameras helping to establish an event timeline, which is optimal for investigative purposes. Furthermore, BriefCam's solution sends notifications to operators alerting them to situations as they arise, heightening situational awareness drastically. The company's technology empowers security teams to work proactively by providing real-time notifications, including people or vehicles loitering, unauthorized individuals entering restricted areas, and face recognition.

BriefCam's VCA platform enables retail clients to observe "hot spots"—where consumers linger or visit most frequently, what objects they interact with, and includes the common demographics for those consumers. For instance, which area of the shelving in the toy aisle do children interact with, which clothing rack do men linger at, or which path do women most commonly take through the retail space. The solution offers an operational intelligence dashboard that quantifies such video information and also integrates data from third-party systems—e.g., access control, point of sale, and time management—giving clients a holistic view of their business and consumers' interests. Moreover, loss prevention teams can identify and track a person-of-interest to drive down theft and use video for investigation and prosecution purposes. The technology can provide data to internal merchandisers to help them make operational decisions to relocate or better secure high-theft items and move profitable products to more optimal locations—e.g., high traffic areas—ultimately increasing revenues.
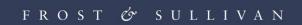
Impressive Partner Network Driving Customer Satisfaction

BriefCam boasts a robust partner network, which includes world-renowned technology brands such as Axis, Dell, Nvidia, as well as VMS integrations with the likes of Genetec, Milestone, and many more. The company's partnerships enable it to provide cutting-edge solutions that integrate seamlessly with existing surveillance infrastructure. The company's out of the box solution optimizes existing surveillance infrastructure and remove the need to implement rip-and-replace strategies, which significantly reduces a customer's operational expenditures. BriefCam's intuitive platform requires minimal training, allowing clients to achieve a rapid ROI. The company receives high praises from its clients, which serve as a testament to BriefCam's innovative and ground-breaking technology.

"With cameras covering the city and BriefCam's unique ability to rapidly pin-point objects of interest, incidents can be solved more quickly, and trends in pedestrian, crowd or traffic behavior can be uncovered in a matter of minutes. BriefCam saves police, fire and security officials a huge amount of time and improves the everyday public safety of our city." – Aaron Miller, Director of the Office of Homeland Security and Emergency Preparedness, City of New Orleans

"BriefCam goes beyond supporting our crime reduction initiatives. It has proven to be invaluable for planning pedestrian and bike pathways to increase safety, and evaluating traffic patterns to find the best locations for events, restaurants and retail stores. BriefCam is helping us combine security with a smart approach to city planning to drive positive change and economic growth." –Sergeant Johnmichael O'Hare, Hartford Connecticut Police Department

The company's global client base includes well-known brands and agencies, such as Amtrak, Austin Bergstrom Airport, Chicago Police Department, Massachusetts General Hospital, and the US Naval Criminal Investigative Service as well as safeguarding national institutions

such as the Statue of Liberty, Empire State Building, Old City of Jerusalem, Waterloo, and more—with law enforcement consisting of roughly 60% of BriefCam's customers.

Conclusion

As the Internet of Things provides security teams with copious amounts of video surveillance footage that needs analyzing, companies must employ advanced technologies with the capability to review, detect, and track people and objects and transform video into actionable intelligence. BriefCam's innovative Video Content Analytics platform, provides a cutting-edge solution that enables security teams to accelerate investigations, attain situational awareness and derive operational efficiencies. With its revolutionary technology, impressive partner network and customer base, and strong overall performance, BriefCam earns Frost & Sullivan's 2019 North America Technology Innovation Award in the surveillance analytics solutions industry.

Significance of Technology Innovation

Ultimately, growth in any organization depends upon finding new ways to excite the market and upon maintaining a long-term commitment to innovation. At its core, technology innovation, or any other type of innovation, can only be sustained with leadership in three key areas: understanding demand, nurturing the brand, and differentiating from the competition.

Understanding Technology Innovation

Technology innovation begins with a spark of creativity that is systematically pursued, developed, and commercialized. That spark can result from a successful partnership, a productive in-house innovation group, or a bright-minded individual. Regardless of the source, the success of any new technology is ultimately determined by its innovativeness and its impact on the business as a whole.

Key Benchmarking Criteria

For the Technology Innovation Award, Frost & Sullivan analysts independently evaluated two key factors—Technology Attributes and Future Business Value—according to the criteria identified below.

Technology Attributes

      Criterion 1: Industry Impact
      Criterion 2: Product Impact
      Criterion 3: Scalability
      Criterion 4: Visionary Innovation
      Criterion 5: Application Diversity

Future Business Value

      Criterion 1: Financial Performance
      Criterion 2: Customer Acquisition
      Criterion 3: Technology Licensing
      Criterion 4: Brand Loyalty
      Criterion 5: Human Capital

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

	STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	**Monitor, target, and screen**	Identify Award recipient candidates from around the globe	• Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies	Pipeline of candidates who potentially meet all best-practice criteria
2	**Perform 360-degree research**	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates	Matrix positioning of all candidates' performance relative to one another
3	**Invite thought leadership in best practices**	Perform in-depth examination of all candidates	• Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	**Initiate research director review**	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best-practice positioning paper
5	**Assemble panel of industry experts**	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized Award candidates
6	**Conduct global industry review**	Build consensus on Award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible Award candidates, representing success stories worldwide
7	**Perform quality check**	Develop official Award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	**Reconnect with panel of industry experts**	Finalize the selection of the best-practice Award recipient	• Review analysis with panel • Build consensus • Select recipient	Decision on which company performs best against all best-practice criteria
9	**Communicate recognition**	Inform Award recipient of Award recognition	• Present Award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10	**Take strategic action**	Upon licensing, company is able to share Award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess Award's role in future strategic planning	Widespread awareness of recipient's Award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.