

FIVE BUILDING BLOCKS FOR ENTERPRISE STREAMING SUCCESS

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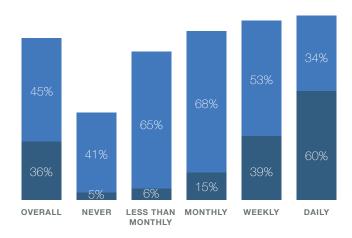
KEY TRENDS IN ONLINE BUSINESS VIDEO ADOPTION

Results from Wainhouse Research's largest annual survey of corporate executives illustrate that live and on-demand streaming video are seen as vital tools in the business communications toolbox. Whether one-to-many video is used for employee training, extending the reach of an allhands town hall meeting or disseminating information on benefits and other human resources issues, the technology is transforming how executives get the word out to a farflung workforce. And a clear majority of executives are recognizing the role that streaming can play in helping them achieve their business objectives. In the WR survey of 1,512 corporate executives conducted in the fourth quarter of 2015, more than four out of five respondents (81%) describe online video as an effective tool for communicating work-related information.

As illustrated in **Figure 1**, the more an individual uses streaming video, the more likely they are to regard the technology as a tool that makes business communications better. Among survey respondents who report that they watch online business video on at least a daily basis, six out of 10 describe online video as a "very effective" tool for business communications. Another 34% of this frequent viewership group describe the technology as "somewhat effective" in this regard.

FIGURE 1

Perceived Effective of Online Video for Business Communications Segmented by Frequency of Business Online Video Viewership



% of respondents with specified viewership frequency describing online Video as an effective tool for business communications

In short, executives increasingly recognize the value of one-to-many streaming the more they use the technology. These perceptions can only help fuel increasing adoption of streaming technology over time and drive greater investment in technology solutions that make online video reliable, secure and easy to use. Beyond basic measures of streaming's effectiveness, a myriad of survey results all point to a market that stands on the brink of broader adoption of one-to-many video for business applications.

STREAMING BY THE NUMBERS

53%

of WR Survey respondents say they "strongly agree" that live online video makes online presentations more engaging.

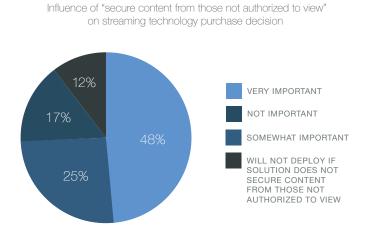
- A total of 77% of all survey respondents say they agree with the statement that "my organization should do more to capitalize on currently available video technologies to enhance business communications."
- Exactly half of organizations represented in the WR survey anticipate spending \$100,000 or more on streaming technologies in 2016. As recently as 2014, only 29% of organizations had earmarked six-figure budgets for online video deployments.
- Nearly two-thirds (62%) of all respondents say they agree with the statement: "I possess the capability for producing videos good enough to share with others at work." Among those under 33 years of age, 79% of respondents say they possess video production skills.

But even though corporate investment in streaming tools and services continues to grow, no executive ever wants to spend foolishly. This report can serve as a primer for executives in the midst of evaluating their streaming technology options, helping to identify the key features and capabilities of enterprise streaming platforms that should be considered most carefully during the purchase decision process. For organizations serious about laying a solid foundation for using online video, these issues should be viewed as the building blocks for streaming success.

STREAMING BUILDING BLOCK #1: SECURING CONTENT

For many executives, concerns over video content security are paramount. When executives present proprietary business information that may give an organization a competitive advantage, no one wants to have to worry about prying eyes that may be looking in on their video. Today's streaming platforms offer a variety of ways to keep video snoops out. Many leverage corporate directories to identify and restrict access to video stored on a corporate network. Some solutions offer the option of employing digital rights management technologies to provide additional layers of security for particularly sensitive content. As illustrated in **Figure 2**, more than half of the describe the ability to secure content as a priority in the streaming purchase decision process. Eleven percent of all survey respondents say that they "will not deploy a streaming solution if it does not secure content from those not authorized to view." Another 48% describe this security feature as "very important" to their purchase decision evaluation. Combining those totals, 59% of survey respondents are citing content security as a priority issue influencing the streaming purchase decision.

FIGURE 2



As usage of online video in an enterprise increases, concerns over network security grow in step. Once the novelty of online video wears off and organizations increasingly employ it in vital day-to-day business communications, executive concerns over content security are easy to quantify.

- Two-thirds (66%) of respondents working at companies that use live online video more than 100 times annually describe content security as either mandatory or "very important" to the purchase decision.
- Sixty-three percent of respondents working in the financial services and professional services verticals describe content security as a purchase decision priority.

STREAMING BY THE NUMBERS

46%

of WR Survey respondents say that the ability to integrate streaming platforms with LDAP/corporate directories is a priority influence on the streaming technology purchase decision.

STREAMING BUILDING BLOCK #2: EMBRACING ON-DEMAND CAPABILITIES

Many organizations experience their baptism to streaming via the use of live online video. Live online video events offer the most intuitive way to extend the reach of existing business communications activities. If an executive is holding an all-hands employee meeting, live video offers a cost-efficient way to broaden the reach of their message throughout an organization. Indeed, for many organizations, the adoption of live video represents the easiest path to proving the return on investment that can result from the implementation of streaming technologies. Leverage live online video to deliver a message to a farflung set of employees, for instance, and administrators can guickly tally all the money saved by eliminating employee travel that would've been required for them to hear the same message in person. Eliminate the need for dozens - or hundreds - of flights and hotel rooms, and the savings add up quickly.

STREAMING BY THE NUMBERS

76%

of WR Survey respondents at companies using on-demand streaming say that the majority of their archived content comes from capturing live events for later replay.

But for all the benefits that come from the use of live video, the development of on-demand content archives is the step that transforms how organizations leverage video to build business benefit. When distributing live content, organizations are extending the reach business activities already taking place. When organizations embrace ondemand alternatives, video evolves into an intellectual property asset woven into the fabric of day-to-day business communications. Initially, many companies will use archiving capabilities to capture live events for later replay. But over time, executives also come to perceive streaming in the on-demand realm as a tool for answering frequently asked customer questions, distributing product information and passing along institutional knowledge from one generation of workers to another.

As illustrated in **Figure 3**, executives at companies that employ online archives identify a wide range of benefits that come from creating on-demand content for later replay. Chief among the benefits cited by these executives is the ability to use content libraries to capture and re-use training content. Thirty-six percent of respondents working at companies that use on-demand online video cite this factor as one of the two leading benefits that result from the adoption of online archiving of streaming content. Nearly one-third (32%) of these respondents say a leading benefit of on-demand archives is that it makes it possible for a video message to reach more employees.

FIGURE 3

Issues cited as one of top two benefits of implementing streaming archives – respondents from companies using on-demand content

ABILITY TO RE-USE TRAINING CONTENT

	36%
,MESSAGE REACHES MORE EMPLOYEES	3
32	2%
PROVIDING ABILITY FOR VIEWS TO TIME	E-SHIFT
25%	
PRESERVATION OF ORGANIZATIONAL KM	IOWLEDGE
23%	
BETTER WAY OF DISTRIBUTING INFORM	ATION TO CUSTOMERS & PROSPECTS
22%	
STANDARDIZING MESSAGE FOR EMPLO	YEES
21%	
ELIMINATES THE RISK OF LIVE VIDEO PF	RODUCTION
14%	
ADDRESSES CORPORATE NEED FOR RE	GULATORY COMPLIANCE TRAINING

CONTENT CAN BE SOLD TO OUTSIDE AUDIENCES, GENERATING ADDED REVENUE

12%

14%

% of respondents at companies using online archives citing issue as one of two leading justifications for investments in on-demand video technologies

The tangible benefits that come from the use of ondemand video have helped content archives establish a substantial presence in many organizations. Survey metrics help to gauge the extent to which on-demand video is used today. These survey results quantify the following adoption patterns for on- demand content in the enterprise:

- Nearly four-fifths (79%) of all WR survey respondents say they have viewed an on-demand online video for business purposes, with 39% of all respondents saying they do so on a daily basis.

- A total of 77% of all companies represented in the WR survey that use online video say they record and store some content for on-demand use.
- More than one-quarter (27%) of companies with more than 500 employees that use online video say that they add at least 25 hours of recorded content to their streaming archives on a monthly basis.

STREAMING BUILDING BLOCK #3: NETWORK MANAGEMENT

For many IT executives, the primary objective in implementing online video technologies is to avoid violating what WR calls the "Hippocratic Oath of Enterprise Streaming:" Above all, do no harm to the corporate network.

Without the right platforms in place, streaming can wind up causing corporate network administrators significant headaches. Data-rich video streams distributed on an ill-prepared corporate network can hog bandwidth and be highly detrimental. In a worst-case scenario, mismanaged streaming video traffic can handicap an entire corporate network, making it impossible for employees to conduct day-to-day business tasks or even exchange e-mail. Little wonder, then, that networking-related issues are among the top concerns for any executive evaluating streaming platforms for implementation.

STREAMING BY THE NUMBERS

71%

of executives surveyed describe "distribute video without harming the corporate network" as a top decision priority.

While the previously referenced issue of "content security" does have substantial influence on the streaming technology purchase decision, none of the 21 technology issues addressed in the WR survey are of more importance to respondents than dealing with integrity of the corporate network. More than three quarters (76%) of all WR survey respondents say that "maintaining network security" is either a prerequisite for deployment or "very important" to the purchase decision. Overall, 71% of all respondents also describe "distribute video without harming the corporate network" as a top purchase decision priority.

Even the idea of just monitoring network activity has appeal to executives when evaluating streaming platforms and their capabilities. As illustrated in **Figure 4**, the previously referenced issue of "content security" ranks as the third most cited issue influencing the purchase decision. But ranking right behind content security is the ability to "monitor network performance." Among all respondents, 8% said that capability to generate such network performance analytics is a mandatory feature for a streaming deployment. Another 50% describe this monitoring capability as "very important" to the streaming purchase decision.

FIGURE 4

Top factors influencing the streaming technology purchase

MAINTAIN NETWORK SECURITY

DISTRIBUTE VIDEO WITHOUT HARMING CORPORATE NETWORK 16% 55% SECURE CONTENT FROM THOSE NOT AUTHORIZED TO VIEW 11% 48% MONITOR NETWORK PERFORMANCE 8% 50% INTEGRATE WITH LEARNING MANAGEMENT SYSTEMS 7% 46% EDIT VIDEO CONTENT 15% 38%	18%	58%
SECURE CONTENT FROM THOSE NOT AUTHORIZED TO VIEW 11% 48% MONITOR NETWORK PERFORMANCE 8% 50% INTEGRATE WITH LEARNING MANAGEMENT SYSTEMS 7% 46% EDIT VIDEO CONTENT	DISTRIBUTE VIDEO WITHOUT HARMING CORPORATE NETWORK	
11% 48% MONITOR NETWORK PERFORMANCE 8% 50% INTEGRATE WITH LEARNING MANAGEMENT SYSTEMS 7% 46% EDIT VIDEO CONTENT	16%	55%
MONITOR NETWORK PERFORMANCE 8% 50% INTEGRATE WITH LEARNING MANAGEMENT SYSTEMS 7% 46% EDIT VIDEO CONTENT	SECURE CONTENT FROM THOSE NOT AUTHORIZED TO VIEW	
8% 50% INTEGRATE WITH LEARNING MANAGEMENT SYSTEMS 7% 46% EDIT VIDEO CONTENT	11%	48%
INTEGRATE WITH LEARNING MANAGEMENT SYSTEMS 7% 46% EDIT VIDEO CONTENT	MONITOR NETWORK PERFORMANCE	
7% 46% EDIT VIDEO CONTENT	8%	50%
EDIT VIDEO CONTENT	INTEGRATE WITH LEARNING MANAGEMENT SYSTEMS	
	7%	46%
15% 38%	EDIT VIDEO CONTENT	
	15%	38%

% of overall respondents describing importance of state feature on streaming technology purchase decision

Network integrity clearly is a fundamental issue that is on the mind of any executive evaluating streaming technology options. Survey metrics illustrating the extent of this focus include the following:

- A total of 63% of C-Level executives say that "maintaining network security" is either mandatory or "very important" in influencing the streaming purchase decision.
- Among executives at companies spending \$100,000 or more on streaming in 2016, 60% of respondents cite the ability to "distribute video without harming the corporate network" as either a mandatory or "very important" capability for streaming solutions being considered for purchase.

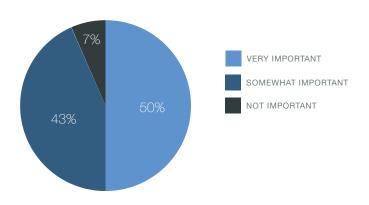
- At companies generating more than \$1 billion in annual sales, 58% of respondents describe the ability to "monitor video delivery performance to troubleshoot network problems" as either mandatory or "very important" in the purchase decision evaluation.
- Wireless networking options must also be addressed. Among executives that use live online video more than 100 times annually, 69% say theysee the ability to "distribute video to mobile devices" as a mandatory or "very important" purchase consideration factor.

STREAMING BUILDING BLOCK #4: VIDEO QUALITY MEASUREMENT

Executives can be picky when it comes to their video. Not only do they want video feeds delivered reliably without harming the corporate network, they also want that video to look good as well.

Conditioned by years of pristine video on the televisions in their family living rooms, many executives have high expectations for the quality of video that they watch at work. Indeed, for many, the ability to deliver high-quality video is the feature that makes the difference between a good webcast and failed online event. As illustrated in **Figure 5**, exactly half of the executives surveyed describe the "measure of the quality of the video signal delivered to end user" as a "very important" gauge of the success of a streaming video presentation. Another 43% of respondents describe the video quality metric as "somewhat important." Combined, that means that more than nine out of 10 survey participants place some level of importance on the issue of "video quality" when measuring the success of their online events.

FIGURE 5



Perceived importance of "measure of quality of video signal delivered to end user" as a gauge of success for streaming video presentation A range of technologies can be employed in the effort to make corporate video "look good." In terms of the quality of the raw video, good networking is only one link in the chain of capabilities that contribute to quality video distribution. It all starts with capturing video using suitable cameras in venues with the appropriate lighting for quality video production. From there, transcoding tools are critical for converting video feeds into lightweight digital files suitable for distribution on constrained corporate networks. Many streaming platforms even make it possible to present videos in customized video players that integrate company branding, logos and other graphic elements to improve the look-and-feel of online presentations.

STREAMING BY THE NUMBERS

54%

of all WR survey respondents say that they "strongly agree" that live streaming video used for business is easier to produce and more reliable than in years past.

While it is true that streaming technologies serve to "democratize" the use of video in the enterprise and extend its reach beyond production professionals, select audience segments still place a priority on enhancing the quality of video as much as possible. Survey results help to identify some of the groups that are keenest to make a good impression via video:

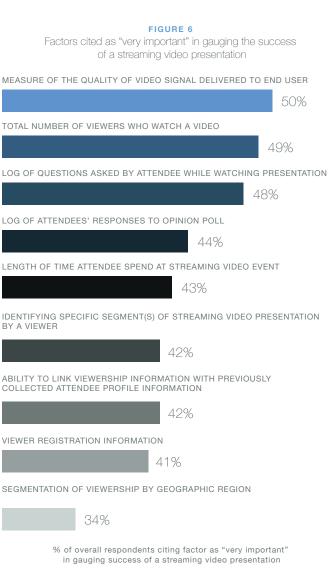
- A total of 27% of executives at companies that spend more than \$100,000 on streaming technologies annually say that the majority of the webcast events they produce originate from a professional broadcast studio, theater or similar venue suitable for high-quality video production.
- Of all information technology executives surveyed, 42% describe the task of "ensuring reliability of webinar distribution technology" as a "very" or "somewhat difficult" task associated with the webinar production process.
- Among respondents working at companies producing more than 100 live online video events annually, 73% describe the ability to "transcode video for distribution to multiple device types" as either essential or "very important" to the streaming technology purchase decision.

STREAMING BUILDING BLOCK #5: VIEWERSHIP ANALYTICS

For organizations seeking to justify the cost of implementing streaming technologies, it is critical to calculate the return on investment that results from their use of online video. Favorable ROI results translate into even larger budgets for future streaming implementations. As streaming proves its worth, business leaders are more willing to allocate even more funding for broader deployment. But quantifying the benefits produced by the use of streaming can sometimes prove to be more art than science. Business leaders need hard data to make the case that online video technologies are pulling their weight within an organization. Streaming platforms that can generate that data - in the form of viewership analytics - give corporate streaming evangelists a fighting chance at proving the impact these technologies have on day-to-day business operations.

platforms extends far beyond simply gauging the raw quality of a video feed. The impact that video has on actual business communications matters, as well. For instance, as illustrated in **Figure 6**, 49% of all survey respondents say that tallies of an event's total number of viewers are a "very important" metric gauging the success of a streaming video presentation, while 48% cite the "log of questions asked by attendee" as a very important measure of streaming video success. Other streaming viewership data also provides organizations hints regarding the intensity of a viewer's interest in an organization's webcast message.

Commonly available analytics tools, for instance, can generate a log of viewers' responses to an online opinion poll (cited as "very important" by 44% of all respondents) and report the length of time an individual spent watching a streaming video event (43%).



STREAMING BY THE NUMBERS

of all WR survey respondents say they view the collection of viewer registration information as a "very" or "somewhat" important metric for determining streaming success

In the world of webcasting, perhaps the most widely known form of analytics comes in the form of automated systems that collect registration information from event attendees. Typically, this data can be used by webcast sponsors to identify prospective customers and target individuals demonstrating their interest in a product through their attendance at a webcast event. Those who view video webcasts merely as a venue for identifying sales leads, however, are selling streaming analytics short. Indeed, among the nine analytics measures presented to WR survey participants, "viewer registration information" ranks eighth in terms of perceived importance when measuring the success of streaming video presentations.

Analytics features can deliver a broad range of usage and viewership information that are perceived as important by WR survey respondents. Topping the list of concerns is the previously discussed feature of video quality measurement, cited by 50% of those surveyed as a "very important" metric of streaming video success. But the scope of analytics that can be supported by today's streaming Even end-user perceptions of streaming analytics can be quantified using WR survey results. One may think of them as "analytics on analytics" and they go as follows:

- Of all sales and marketing executives represented in the WR survey, 41% describe the process of generating analytics on webcast attendance as "difficult."
- A total of 37% of overall respondents describe the ability to track video viewership patterns as either a mandatory or "very important" feature when considering a streaming platform purchase.
- Among all respondents surveyed, 16% describe the inability to demonstrate return on investment as one of the two leading barriers to implementing or expanding the use of streaming technologies.

KEY TAKEAWAYS

Online video is among the most viral communications tools available to executives in the workplace. The more people use video to communicate business messages on a one-to-many basis, the more likely they are to perceive the technology as effective. And the demand for expanding video usage is robust. More than three-quarters of all survey respondents (77%) say that their organizations should do more to capitalize on currently available video technologies.

The survey results reflect that online video is following the same trajectory of other technology categories impacted by the "consumerization of the enterprise." The sheer mass-market ubiquity of mobile phones, for instance, has virtually required reluctant information technology departments to allow smartphones and tablet devices to operate on their corporate networks. Similar consumerization pressures are driving organizations to embrace online video as well.

More than a decade after YouTube transformed online video sharing into a consumer phenomenon, executives are growing more video-literate than ever before. Indeed, as millennials mature into positions of greater work responsibility, the clamor for video in the enterprise will only grow. Nearly four out of five respondents age 33 and under say they possess the skills to produce videos good enough to share with others at work.

While more than nine out of 10 WR survey respondents say that live online video is "easier to produce and more reliable than in years past," organizations still face significant challenges in deploying platforms that deliver a consumer-class video experience with the infrastructure and scale required to enable enterprise-grade performance and reliability.

As executives consider technology investments that address growing worker expectations for using video in day-to-day business communications, they should embrace the five building blocks that serve as a foundation for successful deployments of enterprise streaming solutions.

- Security is Job #1: All streaming technology solutions under consideration must meet strict requirements ensuring that video tools do not create vulnerabilities in the corporate network and that proprietary corporate content cannot be accessed by outsiders without authorization. Bad security is a deal-breaker.
- **Move Beyond Live Online Video:** While the usage of live online video generates substantial business benefit, organizations looking to maximize the impact of their video footprint must embrace platforms enabling distribution of on-demand content as well. Video archives enable time-crunched executives to access engaging content when (and where) it is convenient for them.
- **Keep the Network Safe:** Organizations must deploy solutions that will not harm the corporate network. If video data clogs the corporate grid, it can negatively impact a business' day-to-day operations. Video options that keep workers from conducting day-to-day business tasks on the corporate network are not viable.
- **Good Video Matters:** Conditioned by years of highdefinition television in the family room, employees have high expectations for video that "looks good" at work as well. Executives should consider streaming platforms that measure the quality of a video signal that reaches end users. Also, organizations should consider investments in studios and other production tools that help boost the quality of the video produced.
- Monitoring Behavior is Vital: Viewership analytics are crucial for measuring the impact of video on business performance. Beyond keeping tabs on the number of people watching, data gleaned from viewership measurement can help prioritize the prospects who appear most interested in your products and services. Additionally, human resources departments can track which employees have completed compliance training.

Purchase decision makers should look for solutions that both capture a wide range of viewership information and package it into reports that transform the data into intelligence that enhances an organization's business development efforts.

ABOUT THE AUTHOR / ABOUT WR

Steve Vonder Haar is a Senior Analyst with Wainhouse Research, focusing on enterprise streaming & webcasting. Steve has covered the technology industry for more than 20 years. He previously served as Research Director of Interactive Media Strategies and as Director of Media and Entertainment Strategies for the Yankee Group. He is a graduate of the University of Missouri Columbia with degrees in Journalism and Economics, and holds a Master's degree in Business Administration from the University of Texas- Arlington. He can be reached at svonder@wainhouse.com

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ABOUT THE BUSINESS VIDEO NOW SERIES

This report is the latest in a series of Ustreamcommissioned white papers that track the usage, deployment and executive perceptions of streaming video in the corporate sector.

Produced by Wainhouse Research, the Business Video Now Series aims to foster greater awareness -and understanding - of online video trends by providing data-driven insight, focusing on the expanding role of the technology in enterprise communications. Results from a survey of 1,512 executives conducted in the fourth quarter of 2015 serve as the foundation for information presented in this series.

In this report, survey statistics are used to highlight the five core features of enterprise streaming platforms that do the most to enhance the value of live and on-demand video distributed behind and beyond the corporate firewall. The issues highlighted is this report merit careful consideration from executives contemplating new corporate investments in streaming solutions.