From Niche to Mainstream: The Evolution of Video Collaboration

In the past two years, video conferencing and video-driven collaboration have quickly transformed from niche and specialized applications to mainstream tools used throughout the enterprise. During this time, video collaboration usage has shifted from a technology requiring extraordinary setup and support resources to a communications vehicle that employees can use on an everyday basis to improve teamwork and productivity. This change has placed additional demands on the enterprise to understand and support video. Aberdeen has tracked the business capabilities, performance metrics, and key technologies involved in extracting value from video conferencing and video communications deployments. This report will show how companies use video to create business value by reducing travel, achieving a quantitative return on investment, and creating revenue.

The Business Value Proposition for Video

Over the past two years, the pressures driving businesses to use video in the workplace have dramatically changed. In December 2008, Aberdeen surveyed the video usage patterns of over 180 companies and found that the top pressures for video collaboration were the need for real-time collaboration by geographically dispersed teams and the need to control increasing travel costs. These two pressures made sense considering the recession emerging at that time. However, in the following two years, the corporate perspective of video shifted dramatically (Figure 1):

**Figure 1: Top Pressures for Video Collaboration**

![Graph showing top pressures for video collaboration from December 2008 to November 2010.]

- **72%** in December 2008: Real-time collaboration for geographically dispersed teams
- **64%** in December 2008: Increasing travel costs
- **63%** in November 2010: Real-time collaboration for geographically dispersed teams
- **31%** in November 2010: Increasing travel costs

*Source: Aberdeen Group, January 2011*

Video is still seen as a strong collaborative tool, but over the past two years, travel costs are perceived as only one of several core business pressures for...
pursuing video collaboration in the enterprise as only 31% of respondents identified travel cost as a key pressure for pursuing video conferencing. Why has this occurred?

A number of new pressures emerged in Aberdeen’s November 2010 benchmark on the video frontier. Respondents to this survey sought to use video to improve productivity, increase revenue, and improve the product development and delivery cycle. As companies have shifted from seeing video as a pure travel reduction tool to a holistic business process enabler, Aberdeen has seen the value proposition shift into three maturity levels:

**Travel and Green Footprint Reduction**: In our November 2010 data, 83% of respondents identified travel reduction as part of the value proposition for calculating video-based Return on Investment. Although this value proposition has changed from a strategic pressure to more of a tactical goal in relation to video conferencing, this value proposition has not disappeared. As companies have enacted multiple strategies to reduce travel costs, such as creating strategic meetings management programs and tightening travel and remote employee policies, the ongoing need to reduce travel costs is no longer seen as the sole strategic value proposition for video. Despite the expectation that companies would use video conferencing to support green and environmental initiatives, only 29% of respondents are currently able to quantify the reduction of their environmental footprint associated with video.

**Process Efficiencies**: As companies progress through their first year of video adoption and optimize travel reduction, they turn to more specific value propositions. 35% of respondents in 2010 claimed that identifying opportunities where video collaboration provides superior value was a top strategic action in their deployments, compared to only 24% in 2008. This increased awareness is reflected in the ways companies measured the value of video in areas such as learning and development (L&D), talent acquisition, and project management. Project management has been a consistent use case for video collaboration over time, and the value of talent acquisition interviews has been established in an environment where strategic talent searches must now be nationwide or worldwide. From an L&D perspective, 56% of Aberdeen’s organizations using video for corporate L&D stated that their main reason for using video was to connect employees with remote resources who had deep training and specialized skill sets. At the corporate level, video-led classes for operational skills and ongoing training are emerging as well, but not to the same extent as in the educational arena, where remote education is a clear profit center.

Operational departments such as supply chain and manufacturing departments have started using video to help manage logistics, support partner and supplier collaboration, and achieve stronger relationships with remote peers. However, only 21% of respondents have a current process to identify and enable business activities that can be optimized through video while another 44% plan to implement this type of process in the future. As these use cases continue to emerge, video must become more integrated

"Regular, high-resolution video conferencing saves our senior executives a lot of travel time. It also reduces our environmental impact, which is a matter of priority to us as a green energy provider."

~ Friedhelm Baumer, Head of IT, Energiedienst Rheinfelden, Swiss energy services company
with business process management tools and key corporate metrics for these departments to fully realize the value created by video.

In light of all these use cases and the volcanic eruptions of Eyjafjallajökull that closed down Western Europe in April 2010, some might find it surprising that risk management and disaster recovery did not rank more highly among Aberdeen respondents as a reason to pursue and improve video communications. Only 11% of respondents mentioned supply chain concerns and only 6% mentioned disaster recovery as a top concern for pursuing video collaboration. Although these respondents were primarily among the top performing companies, this low level of awareness represents a potential value proposition that should be considered more thoroughly for organizations with the potential to be disrupted by environmental and geopolitical risks.

**Top Line Growth:** As video collaboration has spread throughout the enterprise, it has been associated with improvements in revenue coming from many different areas: accelerated product and service development, improved marketing efforts, and increased sales revenue. Aberdeen found that 21% of respondents were able to link video collaboration with quantitative improvements in revenue in these areas, as a result of either the ability to design new products and services more effectively, or the additional benefits of delivering a sales presentation through a virtual face-to-face meeting.

The top emerging use case for revenue-based video collaboration is in business-to-business sales, where 34% of respondents have used video at some point to improve sales interactions. The top sales-related factors driving these organizations to use video were the competitive advantage of improving opportunities through face-to-face interactions and the need to manage additional sales territories and accounts. As sales departments seek to cover more ground without losing their key relationships, the value of video becomes more evident.

**Video as a Pervasive Tool**

Overall, 41% of respondents associated video with additional business process efficiencies. These changes took a number of different forms, since video was used in a number of different departments (Table 1):
Table 1: Departments Identified as Using Video Collaboration

<table>
<thead>
<tr>
<th>Department</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Teams</td>
<td>62%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>50%</td>
</tr>
<tr>
<td>Learning and Development</td>
<td>38%</td>
</tr>
<tr>
<td>Business-to-Business Sales</td>
<td>34%</td>
</tr>
<tr>
<td>Product and Service Development</td>
<td>31%</td>
</tr>
<tr>
<td>Project and Portfolio Management</td>
<td>30%</td>
</tr>
<tr>
<td>Supply Chain</td>
<td>20%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, November 2010

A majority of respondents are using video both in their executive teams and in their information technology departments. These two constituencies have long been the strongest stakeholders in enterprise video usage. However, as the bandwidth requirements of video decrease, image quality increases, management capabilities improve, and video migrates downstream to desktop and mobile endpoints, businesses are seeing adoption throughout the enterprise. Video is being democratized.

From an operational perspective, 20% or more of respondents are using video for customer service, supply chain management, learning and development, talent acquisition, and/or project management. Two years ago, use cases of video in supply chain and service departments were few and far between, because of the challenges in implementing video collaboration tools into these operational processes. Today, companies are crossing that chasm to use video as an operational tool.

**Defining the Best-in-Class**

To understand how companies have successfully obtained measurable business value from video solutions, Aberdeen looked at the following high-level metrics:

- Change in travel over the past year
- Fully quantified Return on Investment over the past year for video communications
- Integration of revenue-producing activities with video communications

Based on these metrics, respondents were allocated into one of three categories. The top 20% were labeled "Best-in-Class", the next 50% were defined as "Industry Average", and the bottom 30% was called "Laggards". Best-in-Class organizations had a high level of adoption for value-added traits and reduced travel, while Laggard organizations struggled in all three of these metrics. However, respondents qualifying for this research...
averaged over $850,000 in video endpoint and infrastructure investments, so the differences between Best-in-Class and Laggard deployments do not simply represent a monetary investment, but also represent an emphasis on translating that investment into value.

By understanding how the video collaboration solutions of Aberdeen’s top achievers compared to all others, this report will provide substantive directional advice both for new implementations and upgrades of legacy equipment. Aberdeen’s 2010 definition for Best-in-Class video collaboration was as follows (Table 2):

Table 2: Top Performers Earn Best-in-Class Status

<table>
<thead>
<tr>
<th>Definition of Maturity Class</th>
<th>Mean Class Performance</th>
</tr>
</thead>
</table>
| **Best-in-Class**: Top 20% of aggregate performance scorers | ▪ 72% fully quantified Return on Investment (ROI) on a video conferencing investment  
▪ 95% of respondents experienced revenue improvement from video conferencing  
▪ Reduced corporate travel by 22% over the past year |
| **Industry Average**: Middle 50% of aggregate performance scorers | ▪ 23% fully quantified Return on Investment (ROI) on a video conferencing investment  
▪ 19% of respondents experienced revenue improvement from video conferencing  
▪ Reduced corporate travel by 11% over the past year |
| **Laggard**: Bottom 30% of aggregate performance scorers | ▪ 21% fully quantified Return on Investment (ROI) on a video conferencing investment  
▪ 0% of respondents experienced revenue improvement from video conferencing  
▪ Increased corporate travel by 8% over the past year |

Source: Aberdeen Group, November 2010

The Technical Road to Success

Every vendor claims that their specific set of technologies provides the most business value. By studying Best-in-Class organizations, Aberdeen sought to discover which claims were based on real-life, repeatable success that represented general business needs, rather than on highly specialized case studies that did not represent Aberdeen’s business community.

Unified, Integrated, and Interoperable Communications

Best-in-Class companies are 65% more likely than their Average and Laggard brethren to use video as part of a unified communications solution. This integration of video conferencing into the standard voice and messaging suite is important for multiple reasons.
First, it provides an environment where line-of-business employees can access video on an ad-hoc and unscheduled basis. Second, it allows video conferencing to become more integrated into the employee's working environment. This focus on video-based unified communications also brings a visual element to communications that surpasses traditional web conferencing and slide presentations. By bringing video conferencing into their general enterprise communication suite and improving ease of use to match that of more traditional channels, these companies used this unified and converged communications approach to gain additional value from their video usage compared to all other companies.

Although the quality of video is important and the traditional goals of specialized audiovisual firms in aligning parallax and creating high definition video remain relevant, other technologies proved to be more important in providing business value (Figure 2).

**Figure 2: Key Environmental Video Conferencing Technologies**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Laggards</th>
<th>Industry Average</th>
<th>Best-in-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled and automated dialing to initiate video calls</td>
<td>10%</td>
<td>36%</td>
<td>79%</td>
</tr>
<tr>
<td>Multi-Point (3 or more locations) videoconferencing capabilities</td>
<td>17%</td>
<td>41%</td>
<td>79%</td>
</tr>
<tr>
<td>Professional camera placement to optimize eye contact</td>
<td>10%</td>
<td>41%</td>
<td>79%</td>
</tr>
<tr>
<td>Document and desktop-sharing technologies</td>
<td>30%</td>
<td>47%</td>
<td>79%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2011

Document and desktop-sharing technologies were vital supplementary enablers to video collaboration. Although the face-to-face interactions provided by video conferencing allow for the transmission of important non-verbal information, Best-in-Class organizations saw the value of consistently coupling this experience with formalized information that led the discussion towards a business goal. These organizations were over twice as likely to share documents and desktops compared to Laggards. For product development collaboration, this content may have been a fully rendered three-dimensional CAD model while a simple schedule may have
been sufficient for a project management meeting. However, it was also important that these reference screens and documentation were shared in a manner that simulated real meetings. Just as one would not block out or push aside a colleague during a meeting to get a better view of a document, one should not have to cover up a fellow collaborator to show a document.

Best-in-Class organizations also focus on technologies that lead to increased business-to-business conversation. Since the value of business-to-business sales is increasingly important in considering the ROI of a video solution, companies with multiple forms of interoperability are more likely to gain value from their deployment (Figure 3).

Figure 3: Interoperability and External Communication

The value of video is greatly enhanced by business-to-business (B2B) capabilities. This capability allows video collaboration to serve as an externally-facing channel to improve sales opportunities, brand equity, and even product research and development efforts. Although video collaboration can drive value internally, business use cases such as project management, supply chain management, and marketing benefited from the ability to traverse firewalls and connect to other locations and other organizations. A majority of Best-in-Class organizations also achieved interoperability with desktop devices, personal computing endpoints, and mobile devices created by multiple vendors. This form of interoperability often requires specific SIP/H.323 interoperability to connect legacy endpoints to newer SIP-based endpoints (please see sidebar).

By comparison, the vast majority of Laggard organizations lacked the ability to visually communicate with the outside world or even to connect their own solutions to other endpoints effectively within their own organizations. Laggard companies’ deployments, based on outdated technology, may meet some technical descriptions for advanced video collaboration capabilities,
but they lack the interoperability and functionality that would allow these companies to get a quantifiable return on investment.

Best-in-Class organizations valued the ability to perform multipoint video collaboration. Companies that have gained the greatest value no longer see video as no longer a point-to-point tool. Researchers have attempted to determine the optimal team size, taking into the account the "loafing" effect when too many people are assigned to do a job (also known as the Ringelmann Effect\(^1\)) while also ensuring that the team has enough diversity of opinions and skills exists to complete its tasks effectively. Although there is no firm consensus, teams of between five and ten individuals are common in the business environment. In today's distributed work environment, it is increasingly unlikely that all these individuals will be in one or even two locations. To connect team members and optimize collaboration and comprehension, 79% of Best-in-Class have multi-point video capabilities, compared to only 17% of Laggard organizations.

**Bandwidth Management and Video Infrastructure**

Best-in-Class companies also invested in video infrastructure to improve collaboration. Business deployments of video conferencing traditionally require dedicated circuits or a network overlay to support video needs. Although video is a bandwidth-intensive application, only 24% of organizations currently have a dedicated WAN for video collaboration and only 31% have dedicated bandwidth solely assigned to video. The majority of video-enabled calls in today's environment are riding on a converged network along with other key enterprise applications and traffic.

This does not mean that Best-in-Class companies are abdicating their network and application management responsibilities and simply acquiring more bandwidth to support video. Best-in-Class organizations used application performance and network performance strategies specifically to improve their bandwidth performance. Both Industry Average and Laggard organizations had relatively high adoption of network management capabilities, indicating the awareness of bandwidth issues in video conferencing. However, Industry Average organizations were less capable in managing the software associated with video conferencing solutions and Laggards even struggled with the inventory and identification associated with endpoint management. From a technical perspective, a majority of Best-in-Class organizations had visibility into the network management, endpoint management, and software management challenges specifically associated with video quality (Figure 4).

---

Organizations focused on either gaining value from current video deployments or understanding the business value provided by video must take endpoint and software management into account, since a substantial investment can be easily degraded simply by using an endpoint or management system that has not been upgraded to current software standards.

Once video deployments were installed and live, Best-in-Class companies also focused on maintaining high levels of support. (Figure 5).

Source: Aberdeen Group, January 2011
From a service perspective, between 50% and 60% of Aberdeen’s Best-in-Class community were able to consistently track metrics around the Quality of Service (QoS), support costs, and service level agreements (SLAs) associated with their video conferencing solutions. This lack of visibility is surprising, considering that Best-in-Class companies have overwhelming transformed video conferencing from a pure cost center to a technology associated with revenue. Although Best-in-Class organizations are roughly twice as likely to track QoS monitoring and service level agreements for their video conferencing solutions, nearly half lack these basic capabilities. However, this also reflects many video conferencing users’ low expectations about the quality of service. Companies seeking value from their video conferencing solution would be well served to pursue guarantees regarding packet delivery or packet recovery capabilities to ensure the quality of their video conferencing calls.

**Case Study: Global Management Consulting Firm**

A global consulting firm operating in over 50 countries and over 100 locations identified multiple business challenges due to its geographic dispersion and compliance challenges. The organization sought to reduce both travel costs and the lost billable time associated with travel. At the same time, it also saw a potential opportunity to track its carbon footprint and avoid potential liability.

To develop this solution, the consulting firm’s Information Technology group worked with a technology integrator to determine how to launch a video conferencing deployment well suited to these goals. Rather than relying on legacy video conferencing approaches, the firm sought a solution that would reduce travel while providing consultants with the interaction and clear communications necessary to provide an optimized experience.

In developing this solution, the consulting firm originally started with a comprehensive vendor solution selection process which included contract negotiations for hardware, software, maintenance, and support. The video conferencing deployment was seen as an IT system rather than a pure hardware investment, which allowed the firm to gain benefits quickly and to align technology with business processes in a way that ensured that the business could rely on this new way of doing business remotely.

This technology selection process resulted in a three-tiered technology acquisition consisting of approximately 20 immersive video conferencing rooms, followed by 150 high definition video conferencing rooms and then 150 video conferencing kiosks and approximately 400 units devoted to personal use, to bring video conferencing to the end user. By taking this holistic approach and providing both immersive and end-user based video conferencing technologies, the firm was able to bring the convenience of video to thousands of employees rather than limiting video to executive or operational uses.

To gain the greatest value from its investment, the consulting firm also worked with an integrator to develop operational processes for
reservations and setting up meetings, as well as providing video tools to the firm's customers outside the firewall. The integrator continues to provide analysis to ensure that the firm is maximizing utilization and meeting corporate goals to reduce travel and carbon footprint and realize the greatest possible Return on Investment.

By taking this approach to video conferencing, the firm saw several benefits. First, it realized over 40 million dollars in travel savings on an annual basis, resulting in a payback period of less than one year for this video investment. This travel reduction also led to a carbon footprint reduction of over 7 million tons in carbon dioxide.

However, the travel cost reduction was only part of the true Return on Investment. The 25,000 trips eliminated also provided an estimated 300,000 hours of consultant time, which could potentially bring even more top-line benefit than the pure travel savings provides to the bottom-line. By combining these additional billable hours and collaborative opportunities with the ability to "visit" or consult over multiple continents without travel, the firm gained additional benefits based not just on cost reduction, but on the ability to increase revenue and productivity throughout the organization.

The combination of visual collaboration, travel reduction, and increased productivity provided this consulting firm with multiple levels of value that were achieved from the operational levels of technology and finance as well as the tactical levels associated with line of business employees trying to get their jobs done. This video conferencing investment was maximized by aligning a technological deployment to the consulting firm's core goal of increasing billable hours and quality of work provided.

**Completing the Path to Video Victory**

Information sharing, multi-point video conferencing, interoperable solutions, and management solutions provide important business benefits to a Best-in-Class video collaboration solution, but collaboration is ultimately about people achieving shared goals and aspirations. Without the appropriate strategies and capabilities to deploy video solutions, companies will not gain value from their solutions. Technological excellence is a prerequisite to video collaboration success, but it does not ensure business success. By focusing on appropriate processes, organizational culture, and information management, companies can gain quantitative ROI from video just as Aberdeen's Best-in-Class organizations have done.

From a process perspective, Best-in-Class companies focused on three areas: remote collaboration, iterative self-improvement, and the compliance issues associated with video conferencing (Figure 6).
As organizations become more flexible and distributed, Best-in-Class respondents have focused on empowering remote employees. By providing appropriate policies for travel, standard equipment, and collaborative options (such as video, voice, email, web conferencing, instant messaging, social media and others), remote employees are able to perform with the same productivity as on-site employees. Companies that make money with video collaboration have thought about these policies while only 28% of Industry Average and 19% of Laggards currently have these types or remote telecommuting and collaboration policies in place.

Successful organizations also realize that technology does not work in a vacuum. Only through employee feedback and constant improvement do technologies become better aligned to the needs of the organization. This is why a majority of Best-in-Class organizations have an employee feedback process and the ability to formally identify business tasks that can be improved through video conferencing. While this process does not have to be as formalized as a cross-departmental task force, these feedback and suggestion mechanisms should be made easily available to all employees that could potentially gain value from a video conferencing solution.

Finally, video conferencing provides its own challenges in terms of appropriate use and security. Whether organizations focus on the archiving and eDiscovery rules that are necessary for civil suits or on the privacy and firewall compliance issues that restrict conversations, video collaboration must meet the same standards as other text and voice-based interactions. Video collaboration combines the compliance issues of business-based messages with the misunderstandings and risks associated with holding live events. However, it also provides the opportunity to react to events in a
live and personal manner in cases where an email or phone message may be seen as distant or inappropriate.

Video conferencing deployments associated with ROI and revenue benefited from executive support, appropriate technical resources, and business resources associated with video conferencing (Figure 7).

**Figure 7: Executives, Tech, and Collaborators All Play a Role**

Although executive champions and technical support roles are important for top collaborators, a majority of Best-in-Class organizations also had dedicated resources for business process integration with video solutions. Because they thought of video as a business accelerator, Best-in-Class organizations were over five-times as likely to have expert resources and ongoing classes devoted to aligning video with business optimization.

Video support should not be seen purely as an IT activity. Companies have found value in holistic and pervasive integration throughout operational and strategic departments. However, the key to unlocking this value requires a line-of-business commitment to complement IT support.

Line of business managers also gained value from video usage reports. By understanding the utilization of video conferencing and aligning behaviors to business outcomes, business managers can make more educated decisions regarding employee usage of video conferencing to provide customer support, conduct sales presentations, interview potential employees, or to educate employees, customers, partners, or an external audience.
Recommended Actions

To successfully gain value from a video collaboration effort, Aberdeen makes the following suggestions to gain substantive business value:

- **Define potential value propositions for your organization at each level of video collaboration maturity.** Travel reduction and time saved by employees are important metrics, but only present an initial value proposition for the enterprise. There are still significant gains to be realized by involving operational departments, service, product development, marketing, and sales personnel in your corporate video collaboration plans. As a mainstream business tool, video collaboration can provide value to all parts of the organization.

- **Maintain dedicated resources for network and endpoint maintenance.** The challenge for video conferencing is quickly shifting from bandwidth management to the support of multiple endpoints, software profiles, and custom applications. Make sure that you are supporting the general business video communications of the future rather than assume the outdated and specialized video standards and deployments of the past. To meet this need, organizations can invest in a dedicated in-house staff or a managed services model that leverages the skill sets of dedicated experts. Only 24% of Aberdeen's respondents had a managed video collaboration infrastructure. However, 43% of our Best-in-Class organizations used managed services, compared to only 3% of Laggard organizations, showing a clear correlation between the use of managed services and the ability to receive value from a video deployment for organizations that lacked in-house expertise.

- **Improve ease of use for your video solution.** Over 70% of Industry Average organizations lack training classes or primers for using video conferencing equipment. In addition, only 27% of Industry Average respondents believe that improved ease-of-use would help their organization to consider video conferencing for more employees, compared to over half of Best-in-Class organizations. For organizations that have basic video collaboration technologies in place, make sure that employees can easily schedule, access, and use the video conferencing resources available.

- **Pursue video interoperability from every aspect.** The value of video solutions will only increase as employees are able to tap into a growing network of video-enabled devices from a variety of vendors. As the business gains the ability to connect with other providers’ solutions, desktop endpoints, and a variety of mobile technologies, your organization will be able to support new forms of outreach and broadcasting that add top-line value and bottom-line efficiencies. Business technology has fundamentally shifted from an operational support model to a strategic business enabler. By making sure that a business video solution is flexible and
interoperable to mesh with your organization’s future strategic growth plans, your IT department can improve employee productivity.

- **Consider your future mobile strategy for video.** 72% of Best-in-Class organizations are planning to include smartphones into their video conferencing solution. However, this requires companies to align their video conferencing resources, which are often siloed in their organization, with their enterprise mobility resources, which can be difficult to find. With the emergence of new video-enabled mobile endpoints, such as the Avaya Desktop Video Device, Apple iPhone, Samsung Galaxy, and others, this union of resources will be necessary to provide a smooth and rapid integration that meets the demands of employees. Companies that fail to plan for mobile video will find that their employees will bring their own solutions into the business and unexpectedly tax (both figuratively and literally) shared resources. To optimize video collaboration and the business changes that have been made to improve these virtual interactions, be proactive and aware of this upcoming trend.

For more information on this or other research topics, please visit [www.aberdeen.com](http://www.aberdeen.com).
### Related Research

| Video-Enabled Talent Acquisition: Improving Cost, Quality, and Satisfaction; December 2009 |
| Business-Class Video: Defining the Standard of Business Value; March 2010 |

| Enabling Community Collaboration in Product Development: Accelerating Time-to-Market; January 2010 |
| Unified Communications: Improving Customer Satisfaction and Workforce Productivity; May 2010 |

| Unified Communications: Unleashing Transformation, Efficiency, Collaboration, and Compliance; March 2010 |
| Telepresence and the Video Frontier; November 2010 |

Author: Hyoun Park, Research Analyst, Telecom and Unified Communications (hyoun.park@aberdeen.com)

For more than two decades, Aberdeen's research has been helping corporations worldwide become Best-in-Class. Having benchmarked the performance of more than 644,000 companies, Aberdeen is uniquely positioned to provide organizations with the facts that matter — the facts that enable companies to get ahead and drive results. That's why our research is relied on by more than 2.5 million readers in over 40 countries, 90% of the Fortune 1,000, and 93% of the Technology 500.

As a Harte-Hanks Company, Aberdeen’s research provides insight and analysis to the Harte-Hanks community of local, regional, national and international marketing executives. Combined, we help our customers leverage the power of insight to deliver innovative multichannel marketing programs that drive business-changing results. For additional information, visit Aberdeen http://www.aberdeen.com or call (617) 854-5200, or to learn more about Harte-Hanks, call (800) 456-9748 or go to http://www.harte-hanks.com.

This document is the result of primary research performed by Aberdeen Group. Aberdeen Group’s methodologies provide for objective fact-based research and represent the best analysis available at the time of publication. Unless otherwise noted, the entire contents of this publication are copyrighted by Aberdeen Group, Inc. and may not be reproduced, distributed, archived, or transmitted in any form or by any means without prior written consent by Aberdeen Group, Inc. (2011a)