



Video in Banking: Visualizing the Transformation of Banking

A **Bradway Research** *Special Report*
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Executive Summary

This special report describes the value of real-time video communications for the banking industry as an important, strategic tool capable of transforming a bank, improving workflow efficiencies and delivering high value service and services to customers. Banks should embrace new advances in video technology to provide employees with the ability to communicate with each other and customers more efficiently and profitably.

Research findings have identified a wide range of applications across all lines of business that leverage the value of video capabilities for banks. Banks have successfully improved their competitive position by integrating video across their enterprise, both internally and in customer facing business processes and by reshaping how their business processes create more value. A line of business analysis describes how banks use video calls and meetings.

Benefits realized by banks include improved operating efficiencies, lower costs, better customer service, and expanded revenues across all lines of business. Enabling real-time customer interactions with banking experts in a face-to-face setting is becoming a proven strategy for expanding customer relationships. Executives should review and answer a few key questions about their bank's objectives to assess the relevance of video for their bank. Leaders will continue to uncover new video uses that extend their competitive advantage.

Introduction

The business case for using video technology has evolved and now supports a wide range of business requirements that can create a competitive advantage in virtually every line of business for a bank. This report describes how banks are leveraging video technology to fulfill strategic business goals. Banks around the world have re-positioned their institutions to deliver real-time, high-value services and, simultaneously, improve operating efficiencies. This report describes the current state of video in banking by analyzing:

- the business drivers and opportunities;
- the adoption stages for video in banking;
- examples of visual transformations in banking;
- a summary of the business benefits for bankers; and
- guidance for bankers.

Video in banking has the potential to replace telephone hand-sets at most, if not all, work stations inside a bank. Before jumping to, or dismissing, this conclusion, bankers are encouraged to define how their institution can benefit from a broader use of visual communications with customers and within their internal operations.

As the use of video in banking expands to the desktop, the focus will concentrate on communications that are important for internal and customer oriented business processes. Bankers are approaching the next long term phase of innovation in banking that will have the transformative power comparable to the successful and widespread adoption of centralized computing (mid-to-late 1960s) and the Internet explosion (mid-to-late 1990s).

Achieving this impact will require an effective and deep relationship between the CIO, IT organization and the management leadership across a bank's lines of business, product processing, distribution channels, and top management. In other words, a total institutional commitment to video in banking will go hand in hand with the institution's future success.

Business Drivers and Opportunities in Banking

Since the early 1990s, forward thinking bank executives have acknowledged and valued the strategic importance of well planned and timely IT investments. One of the essential requirements for a successful strategic IT investment is a tight alignment with business objectives and priorities. While virtually every bank claims to have a strategic plan and annual business objectives, the true test of a meaningful plan and objectives is the insightfulness of the bank’s vision/mission and how the bank intends to sustain, or if necessary redefine, how it will create and maintain a competitive advantage.

A host of factors contribute to the challenges confronting banks, thrifts, and credit unions. These include stronger competition for both market share and share of the customer’s wallet; the ease of switching banks or transferring money and assets between institutions; perpetually changing regulatory requirements; cost pressures which can eat into operating profits; and maintaining a winning corporate culture in spite of M & A activity.

One noteworthy IT investment that has expanded within the banking industry has reached a tipping point in adoption that extends well beyond its original solution focus: videoconferencing or visual communications. While some bankers may dismiss the potential value of this technology, a careful analysis shows that video has expanded well beyond the video meeting – conference room within banks of all types, sizes, and geographies and is worthy of CEO, CFO, CIO, and line of business executive attention.

Table 1. Business Drivers and Opportunities

Business unit	Business Drivers and Opportunities
Retail banking	Enable product experts to interact directly with customers as a real-time advisor, close the business Sales meetings involving multiple branches Web-based video access to a product expert
Private banking	Enabling private bankers and advisors to conduct team meetings with a high net worth client Placing a video unit in a high net worth client’s residence to provide real-time access to the advisor
Commercial banking	Video loan committee reviews to speed up approval process for commercial loans Multi-site teamwork to facilitate customer transactions (e.g., FX or rate swaps) Video briefings with Fortune 100 CEO or CFO
Investment banking	Video enabled global trading rooms Multi-site engagement or deal team video meetings Video briefings with Fortune 100 CEO or CFO
Operations, Administration and HR	Video enabled project team meetings Company-wide visual communications Remote video interviews Centralized training delivered to remote sites

Source: Bradway Research LLC

Table 1 lists, by line of business, the drivers and opportunities enabled by video which have been embraced by a growing number of banks. This list represents a sampling of uses for video in banking. The largest banks have deployed video into several lines of business, displaying the flexibility and multi-purpose capacity that video in banking offers. Smaller institutions have also gained value pursuing these uses.

Virtually all banks that use videoconferencing have cited lower operating costs, by eliminating travel expenses, as the initial payback factor. While this payback is valid, more

innovative banks have sustained gains in worker productivity, workflow or business process improvements, and by creating value for customers. These enhanced value propositions extend across all lines of business for the largest banks and also scale down nicely to smaller community banks, thrifts and credit unions. In fact, small institutions can more rapidly leverage the value of video in banking.

A common requirement associated with all of the business drivers and opportunities is the need for key metrics that banks use to measure the value of video in banking. These metrics vary by institution and opportunity. What is consistent is the realization that once video adoption has progressed beyond just using videoconferencing for meetings, a bank has earned back far more than just travel savings. For example, several banks have expanded the share of their customer's wallet through effective cross-selling. One bank's retail banking division installed video technology systems in its branches to assist branch officers by providing high-value information and service offerings to its small business and self-employed customers. This successful implementation yielded a cross-selling closing ratio of more than 75% of the video meetings between a customer and a remote advisor or product expert. This bank realized a competitive advantage that was not easily matched by its competition. Another retail bank has yielded a closing ratio of more than 90% by cross-selling other banking products to its loan customers.

Adoption Stages for Video in Banking

The adoption of video technology is becoming widely deployed at many bank headquarters, important regional offices, and administrative centers with a high concentration of employees. Figure A describes five stages of video adoption in banking and the level of penetration for each stage at the largest banks. Banks and credit unions should map their current level of experience and future video plans against this adoption analysis.

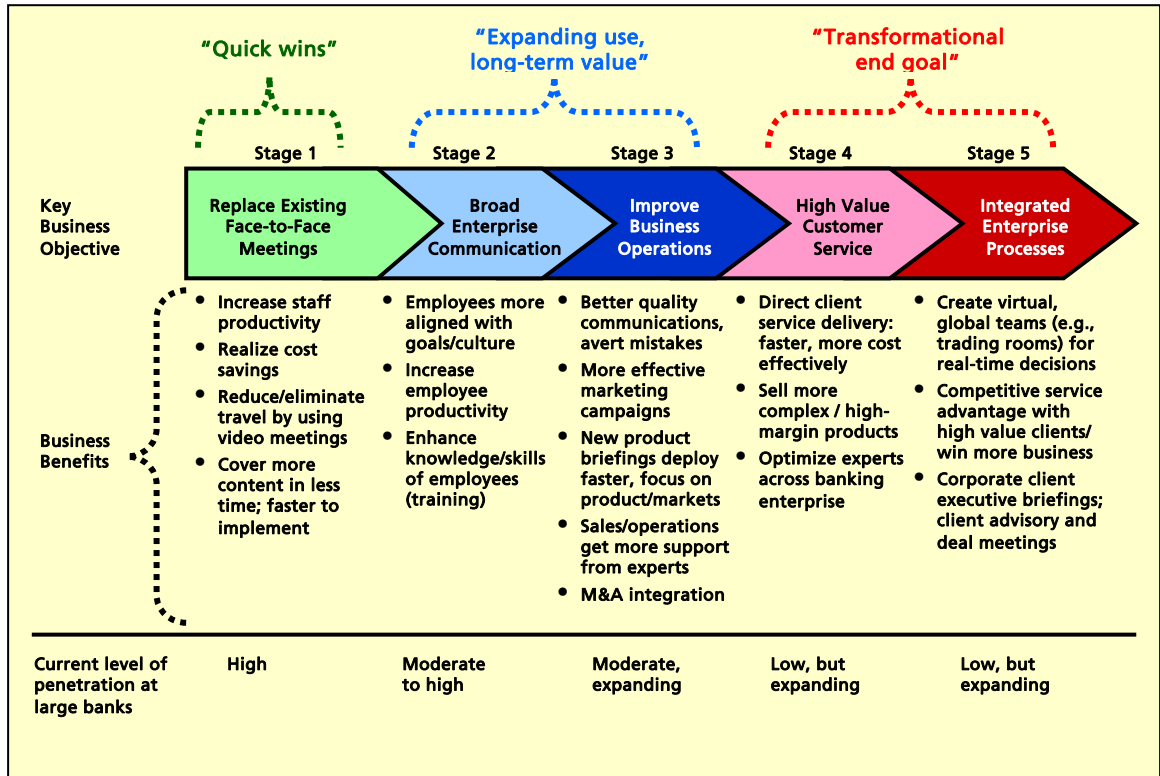
Stage one, "Quick wins," is well established as the most common starting point. Bankers anxious to achieve a rapid payback on video will focus on eliminating operating costs, particularly travel expense, associated with regularly scheduled meetings. Implementations of video technology for internal business communications are typically very successful and result in positive return on investment within short time periods. Other "soft" benefits are acknowledged but not measured, such as improving staff productivity and more efficient use of time by communicating with all affected employees at one video meeting.

Stages two and three can be reached quickly with strong executive sponsorship and acceptance by employees. Company-wide communications from top management and human resources applications for hiring and training are among the target video applications for operations and administrative uses. Departmental or topical opportunities, such as coordinating marketing campaigns, new product roll outs, or project planning and implementation are examples of how video has improved business operations.

Stage four involves customer facing opportunities. Over the past five years, a growing number of banks and credit unions have pursued customer relationship initiatives. Bank executives recognize branches are the one service delivery channel that allows banks to communicate with their customers face-to-face. Banks have been outfitting their existing

branches with more pleasing designs combined with new technology, including video, in an effort to provide a retail merchant store that specializes in financial services. Facilitating video meetings between customers in a branch with experts who may be based in a central location or another branch allows each branch to tap a much larger pool of product experts and certified financial advisors to service and sell to customers through their local branch.

Figure A. Adoption Stages for Video in Banking



Source: Bradway Research LLC

To achieve stage five, banks have figured out how to leverage video to integrate enterprise wide business units and/or processes. One high value opportunity has occurred within the trading rooms of global investment banks. For example, traders use video units to visually communicate with colleagues in New York, London, Frankfurt, Hong Kong, Tokyo, and Singapore. Other enhanced uses, either on collaborative or independent deployments, have enabled multi-site team-based engagements linked to M & A or underwriting deals.

Visualizing the Transformation in Banking

Video technology is becoming pervasive at large banks, particularly the head office and important regional offices. Many banks now have between 100 and 500 large and small conference rooms equipped with video capabilities. These institutions have also invested in executive desktop and workstation video units. Just as significant is the enterprise-wide deployment of video at every employee’s desktop at some smaller banks and credit unions. An important telecommunications infrastructure (i.e., IP for Internet Protocol) has been installed at many banks to support data and voice telecommunications. The IP infrastructure can support video units anywhere in the bank using standards-based video technology equipment. This plug and play infrastructure has expanded the possibilities for video-based

applications. Research findings have identified successful line of business video applications in retail banking, private banking, commercial banking, and investment banking.

Retail banking. The branch needs to remain a primary location for delivering higher-margin products. One of the most cost-effective sales and service tools for delivering knowledge about these more complex products to branch-centric customers is video. To better understand the potential for face-to-face video calls and meetings in the branch, it is critical to understand the importance of the branch relative to other bank channels for consumers, staff, and bank executives. Converting the branch into a place customers want to visit when they are in the market for higher-margin services, such as mortgage loans and investment advice, can be a highly profitable model. Similarly for small businesses and the self-employed, the branch is where many of these customers want to discuss financing and retirement investment options with an expert. Table 2 summarizes the retail banking video initiatives at a sampling of retail banks located in the US, Asia/Pacific and Europe. Four of these banks have introduced video in the branch environment by deploying the TANDBERG Real Time Advisor™ (RTA) solution.

Table 2: Sampling of Retail Banking Video Applications

Business unit	Branches	Video initiative	Description of customer initiative(s)
Stillwater National Bank (US)	17	Enterprise communications	Tri-state merger integration, serving healthcare and medical professionals, planning to use RTA
Retail bank in Taiwan	> 20	RTA via Web video chat session initiated by customer	Customers can open a video chat session with a bank representative within the bank's website; customer reps are able to discuss products, answer questions, and take application data in appropriate situations
New England Credit Union (NECU, AU)	22	Enterprise communications, RTA	Wide usage, loan and financial advisor video meetings in all branches, planning to replace all telephones with video-based desktop units
Visions Federal Credit Union (US)	22	Enterprise communications	Widespread internal usage, conducted over 250 video seminars in branches for customers and staff
DnB NOR	> 200	RTA	Piloting customer video meetings with brokers, traders and lending/financing specialists at remote branches

Source: Bradway Research LLC

Research findings have confirmed that video technology has the potential to add more value to bank branches. Banks and credit unions that are customer-centric achieve cross-sell and customer retention targets. Customer-focused banks want customers to visit their branches and, when they are in the branch, they want to offer customers the highest-quality service while consistently completing high value interactions in shorter cycle times. The time needed to implement these retail banking video initiatives can be surprisingly fast.

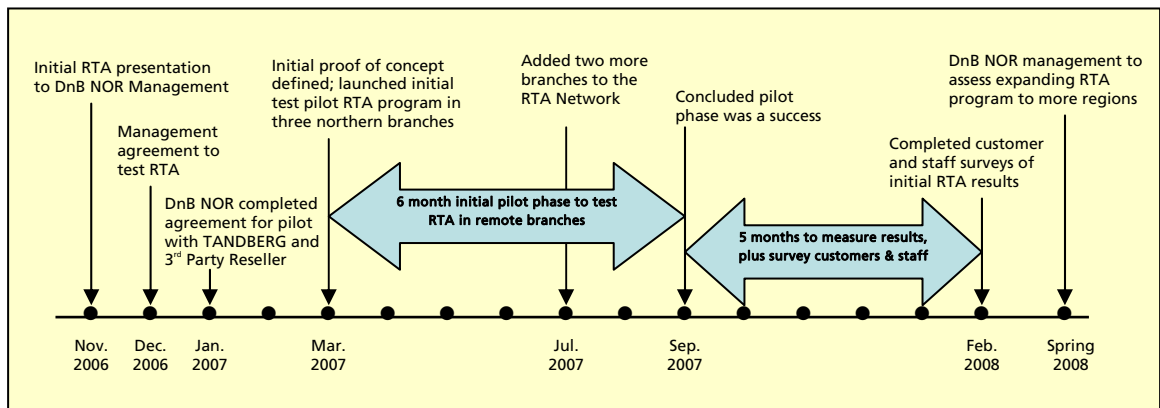
An example of how quickly a bank can consider and implement a retail banking video initiative is DnB NOR, a US\$325 billion Scandinavian regional bank holding company based in Oslo, Norway. DnB NOR's mission is to "offer individual customer solutions, professional advice and proximity to customers." The company's experience using video began in 1996 and now numbers over 100 videoconferencing units installed in meeting rooms across its corporate offices in four continents. DnB NOR is the largest financial institution in Norway

with over 200 offices serving 2.1 million customers. This branch videoconferencing initiative took just five months from the initial presentation to launching the pilot.

Among the challenges DnB NOR faces is delivering a full set of high value services to customers that use remote branches. Figure B illustrates the relatively short, 15-month time line associated with its video in retail banking video pilot project that connects a regional office in Tromsø, Norway with five remote branches. The distance between Tromsø and these five branches is between 260 Km and 800 Km (or 160 and 500 miles). Most of these branches are, for practical purposes, accessible only by air. The key financial services units that are centrally staffed in Tromsø are DnB NOR Markets and DnB NOR Finance. The former unit provides investment advice and services on a range of investments including equities, foreign currency, and interest rate swaps. DnB NOR Finance provides mostly leasing services.

Each branch uses a TANDBERG 3000 connected to the IP telecommunications network to conduct video meetings with the brokers and loan specialists at the regional office. Instead of devoting a day or two for a field trip to meet with a customer, the brokers and loan specialists can now complete multiple video meetings (as many as five in one day to date) with customers at these remote branches. Branch staff members schedule the video meetings and start the video session for the customer. Customers have used these video meetings to get advice on investments, review investment plans prepared by the brokers, discuss and complete trades in equities, foreign currency, and arrange interest rate swaps.

Figure B. Retail Banking Video Implementation Time Line at DnB NOR



Source: Bradway Research LLC

As DnB NOR management reaches the next evaluation stage in the Spring of 2008, a focus on several metrics will determine future rollout plans for the TANDBERG Real Time Advisor™ (RTA) project. Three primary metrics that will be analyzed are the customer satisfaction index, business volume effectiveness, and an environmental component. The satisfaction index is determined through customer surveys (see Figure C in Business Benefits). Business volume effectiveness will consist of incremental customer business, completed customer video meetings per day per branch, and a time-sensitive productivity factor for the brokers at DnB NOR Markets. The environmental component will be based on travel reduction, particularly airline travel, and a measurable carbon footprint reduction.

Private banking. The extension of the RTA concept discussed in retail banking into the world of private banking has been accomplished. For example, one large, global private

bank has deployed the use of advisory-based video banking directly into the residences of high net worth clients. In this case, the high definition, secure desktop video units are installed in the client's "second home," usually in a private, upscale vacation home using a DSL or cable modem as the (Internet) connection.

The rationale behind this deployment is simple – the customer values the ability to visually connect with the client advisory team on a timely basis. The cost of supporting this business case is reasonable given the extent of the value of the high net worth client's business with the private bank. In this case, the global private bank uses the advisory video service to determine which high net worth clients are eligible (assets under management, advisory fees) and for differentiating its capabilities against other private banks for key clients.

The business driver for deploying video technology in the high net worth client residences was to enable "on demand" access to the client advisory team whenever the client requested a meeting. The client advisory team uses the bank's internal video network to assemble the necessary experts for a client video session. The global private bank leverages its parent's global virtual private network to connect the client video units inside the parent's firewall to meet security requirements.

Another private banking deployment occurred at Industrial Commercial Bank of China (ICBC) in Taiwan. This subsidiary of ICBC has 81 branches in Taiwan and uses its video banking implementation to support its advisor network that serves affluent customers. The bank uses the video network for its daily roundup meeting every morning. Many topics are covered in these meetings, including sales and marketing initiatives, new products, analysis of market data/trends, and discussion of customer needs. The comprehensive, real-time coverage of these topics with all advisors has contributed to better customer service and improved compliance. Telephone, fax, and email alternatives that previously addressed these topics have been discontinued or substantially reduced.

Commercial banking. Usage of video in commercial banking is primarily focused on improving business processes that benefit the commercial or corporate banking client. As video has become widespread at a bank's headquarters and its important regional or branch offices, business units such as commercial lending and cash management are collaborating through video sessions. For example, one large bank based in Asia/Pacific has used video sessions to coordinate foreign exchange trades and futures contracts for its agricultural business clients. These video sessions connect account managers with the bank's trading room to get pricing and to facilitate the desired transactions for the client.

At several other commercial banks, video sessions are now used on a regular basis, both scheduled and ad hoc, to complete commercial loan reviews and to discuss credit underwriting standards. This usage ranges from the world's largest commercial banks to community banks like Stillwater National Bank (SNB), a \$2.2 billion bank, with 360 employees and 17 offices in Oklahoma, Texas and Kansas. SNB uses video for many applications, including commercial credit underwriting, that connect every part of the bank.

Investment banking. Investment banks and other capital markets institutions have been among the most aggressive and successful adopters of video technology. Examples of successful, high value uses include implementations at global firms like Calyon Corporate &

Investment Bank. This institution was formed by the merger of Credit Agricole and Credit Lyonnais in 2003. Over 50 senior bankers based in over a dozen global offices use video for a range of business needs, including meetings with clients and global team members. Another large investment bank has placed video units into hotel rooms during deal negotiations and due diligence where time and privacy are critical to success.

Another application that has become widely adopted is in trading rooms. For example, more than 700 traders at Commerzbank's offices in London, Frankfurt, Asia/Pacific, and New York use video to create multiple, global (follow the sun) peer-to-peer trading desks that run concurrently. Head traders can see all of the trading rooms or have one-on-one sessions.

State Street, one of the world's largest custodians and asset managers, uses video to support its hedge fund customer service operations that are co-located in New York and Ireland. This operation requires dynamic, real-time support for multi-billion dollar hedge fund clients. Video enables ad hoc and regularly scheduled video sessions for client service fulfillment.

Another firm, based in Asia/Pacific, has deployed video units into key institutional client sites so that portfolio managers can have video calls with its research analysts to discuss investment recommendations. This firm aims to differentiate itself from its competition.

Business Benefits for Banks

In most cases, the initial business case made by bankers for deploying video technology in their institution has been tied to reducing travel expenses. In the past three years, as video technology has advanced to include high definition and is easily installed where an IP infrastructure exists, cost recovery as the primary value proposition has been complemented by other factors. More banks are engaged in using video to create a competitive advantage. Most often the value of time is the critical element. Examples of the value of time include:

- Value created in the trading room can add up to millions of dollars over the course of a year as profitable, coordinated trades occur faster, often in seconds or minutes.
- Faster turnaround on high value services, like commercial loans or getting current market pricing on futures or foreign exchange positions, for a client gets the order.
- Quarterly Global IT operations meetings that connect six centers located on four continents are now completed over video, eliminating two days of long distance trips.

Another dimension of benefits that has become widely accepted is more efficient business workflows and processes. Examples of these benefits include:

- Better team interaction, resolving language barriers among global team members, eliminates adverse execution mistakes due to a misunderstanding.
- NECU (AU) is planning to set up automated video call roll over to next available staff member to eliminate lost video calls and higher closing ratios for RTA.
- Video has become the standard channel for bank-wide training which can support on demand sessions, recorded video and ad hoc training oversight with relevant experts.

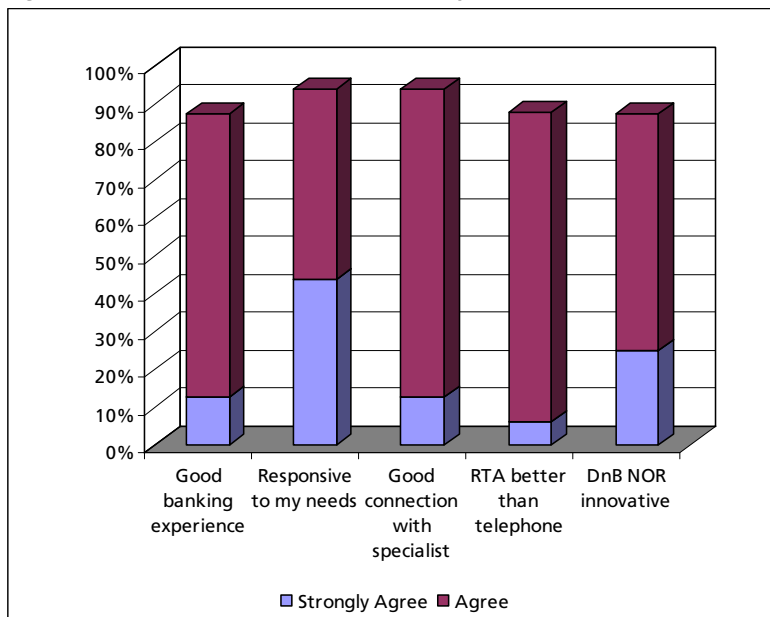
- SEB Card (SE) quickly integrated disparate IT systems and operations resulting from a merger that covered four countries and 800 staff as well as its IT services supplier.
- A community bank uses video for its executive committee, several board committees, compliance, IT projects, branch communications, and loan officer productivity gains.

Measuring the total customer experience or the business value associated with real-time video for customers is most widely seen in retail banking. Measurements include:

- A large North American bank measures the number of services by customer, not new revenues, because the more services used directly correlates to eliminating attrition.
- NECU is now producing 10% of its loan volume via video meetings which include introductory meetings between a client and loan officer or gathering application information. Its surveys have measured that 100% of its customers are happy to use video and 75% are glad they were introduced to its convenience.
- Commerzbank (DE), with over 800 branches, has deployed RTA and is achieving payback in one to three months, based on incremental business and savings.

Another dimension to measuring benefits involves a bank’s customers. As part of its evaluation process for its RTA pilot, DnB NOR implemented a Web-based customer survey to measure the quality of the retail banking video experience. Figure C displays the results of survey responses which represent about 15% of the customers that have participated in the pilot. Over 80% of customers responded with either “strongly agree” or “agree” to confirm the value of their experience using video to bank with a specialist. The final question captured responses to a potential brand-enhancing metric measuring the customer’s view of DnB NOR as “innovative.”

Figure C: DnB NOR Customer Survey Results



Source: DnB NOR Bank, Bradway Research LLC

More recently, banks have recognized an environmental component, or “Green” initiative, as a socially responsible justification for using video technology as managers catch up with their direct reports more easily. In addition to environmental benefits, banks are also realizing that video provides a productive means of achieving a better “life balance” and more productive use of time for “high value road warriors” by cutting down on travel.

Guidance for Bankers

What actions should bankers consider after reading this report? In researching the use of video in banking with several dozen sources, the issue of justification was one of the first topics to surface. Analysis of the responses from leading institutions indicates that bankers should not allow themselves to get trapped into justifying video based only on cost savings in a finite time period. Do many bankers rationalize their spending on, or cost savings related to, telephones or email? Video calls will follow suit.

Two key findings should frame the future. First, the arrival of affordable and widely available high bandwidth on an IP infrastructure is really the key to unleashing the business possibilities that can be achieved with video in banking. Second, the CIO and IT organization need to be the stewards responsible for delivering video based services. This means that some banks must transfer video stewardship away from their facilities department.

The future is no longer just about meeting rooms. Rather, the future is about visualizing the transformation of banking on an enterprise basis as the IP infrastructure supports a convergence of voice, data, and video for a bank. For example, one firm’s statistics on completed video meetings and calls exploded at a CAGR of more than 50% between 2005 and 2007. Completed meetings or calls more than quadrupled to over 10,000 per month while the number of video end points doubled over the same time period.

Leading banks in all lines of business have proven that video has become a strategic tool that is now critical to their firm’s long-term success. Realizing the value of video is a measure of how far ahead of the competition these leaders are strategically. Bankers should first think about, then change their business processes when introducing video in banking capabilities. The real long term benefits are sustained by improving workflow efficiencies.

Some technical issues remain in a state of development. Meeting security standards that satisfy a bank’s firewall requirements is an emerging issue for third party video calls. Video industry standards have been adopted for IP-based firewall traversal that will open up many new uses and applications for video in banking that extend beyond just internal applications and uses.

Banks should plan for the long term as both business partner and customer value chains become ready for video in banking services. These options can include browser based delivery using either two way video (for clients with a web cam) or one way video – two way audio with customers and partners. Banks with existing legacy video installations that are based on ISDN infrastructure need to incorporate a transition plan that can continue to utilize these installations in the context of an IP based infrastructure that can expand the use of video in the bank’s lines of business.

Bank management teams that are debating the value of video in banking should consider their answers to the following questions.

- Is the bank using an IP infrastructure? If one is not implemented, determine why not and when one will become feasible. The lack of an IP infrastructure significantly limits the potential value of video in banking, leaving a bank at a competitive disadvantage.
- Does the bank's management team comprehend its game plan for the next three years? If the plan is to continue with business as usual, then the focus is probably on operating costs, productivity, and staying even with competitors. Video-based services should be considered in this context – staying up with competition and lowering costs – by focusing on implementing stages 1, 2 and 3 of Figure A.
- If the plan is to gain ground against competitors, then bankers need to make sure that their firm's infrastructure, business applications, and customer-facing business processes will position their staff to deliver better customer experiences which will lead to increased market share and in turn more customer wallet share. These banks should consider a plan that fulfills stages 3, 4, and 5 of Figure A.
- Is your bank committed to challenging its existing practices and business processes and pursuing new ones if there is value to your customers and staff? If video technology is already in use, consider forming teams to explore how to extend its usage and value. A continuous innovation process that seeks to leverage the potential of video in banking will lead to future competitive advantages in banking.
- Does your bank have the internal video expertise to transform your bank? If not, seek out the appropriate technology suppliers or professional services firms to assess your options, including the evaluation of managed services video delivery.

About Bradway Research LLC

Bill Bradway founded Bradway Research LLC to study the attributes that make a difference in the performance of banks (including thrifts and credit unions). Two key attributes that form the foundation of Bradway Research's analytical studies are the business strategies pursued by banks and the execution of those strategies, including the impact of technology solutions in achieving successful results by a bank.

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