Revolutionizing the Airline Industry with Improved Communication and Collaboration

By: Ty Levine, VP of Marketing and Business Development, BroadVision
After a decade of reducing flight schedules and implementing fees on everything from luggage to pillows, the airline industry needs to look internally and create operational efficiencies and productivity gains in an effort to find new sources of bottom-line impact. The global airline industry has faced multiple challenges over the past decade. High fuel costs nearly bankrupted some legacy air carriers. The recession drove M&A activity, further altering the industry. Airlines radically reformed their business model, creating revenue streams from fuel surcharges, luggage, in-air food, and itinerary changes. Tough battles with unions altered the cost landscape even further. While reduced flights addressed the empty seat dilemma, airlines found increased seating from reconfiguring the cabins of many planes. All of these changes have led to a frustrated and disgruntled travelling public.

Financially, airlines are stronger than they have been in the past 25 years. But, passengers view air travel as a necessary evil. No longer is it a privilege of the upper class; flying is accessible to everyone, and planes are full. The airline industry is one of the largest service-focused industries. Despite attempts to create loyalty through frequent flyer programs, discount airlines and consumer choice impact modern air travel. Growth will not come from new routes or filling empty seats. With flight capacity currently exceeding 80 percent, growth will come from further changes in how airlines operate.

There is only so much airline executives can do to increase top-line revenue. Operational and service improvements combined with a better, more engaged workforce are areas where airlines can improve the bottom line. Whether an international long-haul carrier, a hub-and-spoke domestic airline, or a point-to-point carrier like Southwest, airlines are complex, labor-intensive behemoths with workers spread all over the map. Engaging workers in a collaborative environment is a necessity, and technology must play a leading role in fostering communication and collaboration throughout the organization. Gains here will provide cost savings and bottom-line benefits.

Today's Airlines - Challenges

Commercial airlines employ 8.7 million people and support an additional 50 million more workers, in offices and airports around the globe, and they move three million passengers per day over 100,000 flights. The result is millions of people disconnected, yet interconnected in their jobs. This does not include the millions of packages and cargo transported on commercial and non-commercial planes. Problems arise every day, from small mechanical issues, to flight cancellations due to weather, to mixed-up reservations, to lost luggage and packages. Regardless, airline colleagues must communicate with each other to make the best of all situations and delight their customers.

Communicating to personnel throughout the network is time consuming and challenging. Southwest Airlines, for example, a leading US domestic airline flies 679 planes an average of six flights daily to 97 destinations. Few industries have 97 corporate offices, a main headquarters and additional maintenance facilities spread across one country. Foreign airlines add multiple countries and native languages
to the mix. The variety of job functions also impacts the effectiveness of communicating to disparate workers. Not everyone sits behind a PC. Many workers aren’t “connected” to any device, and others use a “terminal” to conduct their business. Email and postal mail is used to reach departments and organizations, but one-to-one or corporate-to-one communication is almost impossible. Often, email is not a universal tool at all airlines. Through mergers and legacy systems, many airlines have multiple email platforms creating barriers to effective communication.

Employees are used to social, connected and mobile tools in their personal lives and desire the ability to communicate and collaborate whenever and wherever they choose. Airlines are not immune to security concerns, and implementing mobile and flexible systems must include high-level security features. Improving real-time communication and collaboration will create a more engaged workforce, focused on sharing knowledge, solving challenges faster, and reduce costs.

**Communication and Collaboration Opportunities**

A 2014 PwC “Global Airline CEO” survey noted that, “Technological advances carry huge potential for airlines, both ‘above the wing’ in their relations with customers and ‘below the wing’ in managing the supply chain, operations and maintenance.”

Mobile devices, allowing for instant connectivity, will be the biggest driver in turning potential into actual gains. Where opportunities exist:

1. Maintenance
2. Field-to-office communication
3. Plane-to-customer/Plane-to-ground communication
4. Cross-enterprise collaboration (airplane building)

**Maintenance**

Plane breakdowns, even minor issues like bathroom or seat issues, can impact multiple flights during a plane’s scheduled day. With short turnarounds, often less than 30 minutes, improving communication between the aircraft and ground maintenance will improve customer service and help prevent the escalation of minor problems into aircraft shutdowns.

**How?**

Combining mobile device use with in-air Wi-Fi, flight attendants can use collaboration tools to communicate directly with maintenance departments on the ground at the next destination and main facility simultaneously. Rather than use a plane’s cumbersome and limited communication system—limiting an attendant to an alert or brief text-based
message—an attendant can snap a picture and route it immediately. When the plane lands, maintenance has already analyzed the situation and can immediately begin repairs. Time savings, problem documentation, and multi-department resolution occur in one single source of truth.

New tools that are virtual, mobile and social will empower in-flight cabin crews and pilots to connect with maintenance, corporate and executives – anyone in the organization in real-time – addressing issues immediately.

**Office-to-Field Communication**

Managing more than 40,000 email addresses across multiple platforms is not an efficient or practical means to communicate when your workforce is distributed across nearly 100 locations. Currently, corporate headquarters rely on communication to a department, organization or location and then require a local manager to distribute their directives. A communication and collaboration platform allows for two-way interaction and stronger engagement between corporate offices and individuals in the field. In a distributed workplace environment, opportunities to enhance collaboration and sharing will create a more engaged workforce.

Breaking free from legacy systems does not have to occur immediately. Communication and collaboration platforms do not have to replace email; rather, they can supplement and/or eventually replace static communication tools. Technology should be seen as complimentary, not a way to cannibalize current systems, until those processes become cumbersome and obsolete.

**Customer Satisfaction and Passenger Engagement**

“High performing airlines of the future will need a new ‘customer centric’ business model. This transformation will impact almost all elements of the airline, including talent, organization structure, business processes and enabling technologies.” Consumer behavior and comfort with mobile and social technologies are driving engagement opportunities. Like it or not, we live in an always-on world of digital engagement—anywhere and anytime. Airlines, an industry historically built with siloed organizations, will need to adapt and incorporate tools to internally collaborate and efficiently connect with external audiences.

Today, passengers receive gate and flight alerts via email or text on their mobile devices. They can use phones to access airline, airport and destination information. The next technological or mobile evolution will personalize the communication experience between airline and passenger. Breaking free from one-way communication, like email, will enable airlines to build collaborative experiences, archive best practices, and create sharing experiences throughout the organization. When the ground staff exceeds expectations and delights a customer in Bangor, the information can quickly flow throughout the workforce and surface in Boston or Baltimore. Moving to a collaborative environment will create opportunities to increase customer loyalty, improve employee engagement, lower costs and increase revenues.

**Building an Airplane in the 21st Century**

With high fuel costs, inefficient legacy aircraft, and passengers demanding the best, most comfortable flying experience, major airplane manufacturers – Boeing and Airbus Industries – have begun delivering technologically advanced planes. What was once a single-company endeavor – concepting, testing and building – has become a collaborative effort of many companies coming together to create the airplane of tomorrow. When Boeing’s 787
Dreamliner took its maiden commercial voyage, more than 50 other companies played a role. These companies worked in partnership with Boeing “from initial idea through design, testing and manufacturing.”

Creating a communication archive and managing document sharing with a single source of truth will ensure better decision making, trouble shooting and on-time performance. With Boeing’s Dreamliner program budget at $32 billion dollars and single plane cost of $116 million, effective communication and collaboration internally, amongst partners, and between Boeing and their airline customers is paramount. Like any project-managed process, having the right tools will benefit the entire program.

Virtual-Mobile-Social

With the introduction of Vmoso, BroadVision created a platform addressing the communication and collaboration challenges within the airline industry. Vmoso profoundly changes the way people communicate, how assets and documents are organized and managed, and how tasks and activities are tracked. Vmoso accomplishes this in one platform with enterprise grade security and data protection built in. It organically drives one-to-one and one-to-many engagement.

Vmoso is five workplace activities in one platform. There is no longer a need to use an email platform, not integrated with a chat tool, that isn't connected to a task management solution or any activity that lacks security features. These five activities are:

• email
• instant messaging
• content sharing
• task management
• social networking

Rather than wait for a plane to arrive at a gate and then inform maintenance of a problem, or call from the plane to the ground to alert them of a seat failure in a specific row, flight crews can document the issue, use their mobile phone to take a picture and send a detailed notification to the next destination’s maintenance team—all before the plane touches down.

Mobile devices and other modern technological advancements make this a possibility. Ground maintenance at a smaller airport can interface with corporate maintenance to facilitate quicker problem solving and repairs. Taking a plane out of service is an inconvenient and expensive proposition. Even taking a seat out of service could impact a traveler’s entire journey. Mobile capabilities create expectations of an immediate response. Vmoso works seamlessly on desktop or mobile devices, providing tools that give individuals consistent access to real-time communication and instant collaboration—wherever they are, whenever they work, and on whatever device they use.

Vmoso provides any team, group or department within the airline, in an office or in the field, a platform to easily share information and communicate effectively and efficiently. A gate agent can immediately share a situation with their local managers and corporate office simultaneously. With 97 cities served, an airline like Southwest can empower every field employee in cities large and small to seamlessly share problems, solutions and best practices.
Everyone has access to the real-time communication, documents and critical information needed to make timely decisions. Every aspect of the communication stream is contained in a single source of truth which ensures consistency and accuracy throughout. Efficient workflow allows office workers and field workers to simultaneously see information. No more delays involved in information transfer. Alerts, built into Vmoso, will notify all participants of activity immediately. Problems or issues surface faster and can be addressed more quickly and with more accurate resolution.

With a 5-in-1 communication and collaboration platform, users can:

Create **CHATS** - Relationship-based, private-channel communication for convenient/ongoing or persistent/long-lasting conversations.

Issue and respond to **TASKS** - Process-, issue-, case-, or event-based private channel for more intensive/accountable workgroup collaboration – workflow and approval process improvement.

Make **POSTS** to the team - Community-based, semi-private, semi-public, or public channel for sharing or obtaining knowledge both deliberately and serendipitously.

Create **SPACES** to organize, find and track documents and information. A space is a universal location for grouping, categorizing, and sharing anything with anyone from anywhere on any platform.

Use **BIG DATA ANALYTICS** to identify critical, continually used documents and the knowledge expertise often hidden in an organization. Use Vmoso analytics to pre-empt delays and create best practices for future projects.

Whether you choose a total engagement platform or a complimentary solution, any employee, whether they have multiple peer-to-peer interactions daily or those who only have one or few interactions can communicate and collaborate through Vmoso or adjacent to it through email.

**Conclusion**

One plane, six cities, three flight crews, and two flight delays—this is a day in the life of a commercial airliner transporting people and goods from one point to another. Delighting customers and creating loyalty is a never-ending challenge for airlines in a competitive and cutthroat industry, with high fixed costs and low margins.

Airlines must engage their employees in a collaborative environment and communicate across the organization to improve customer service, empower disconnected workers and create operational efficiencies that add to the bottom line. Tools like BroadVision's Vmoso provide a platform for every worker to effectively and seamlessly collaborate in a secure environment—anytime, anywhere and on any device they choose.

**References**

1 Air Transport Action Group – Aviation Benefits Beyond Borders, April 2014 - http://aviationbenefits.org/media/26786/ATAG
2 Fact Sheet – swamedia.com
3 PwC Global Airline CEO Survey 2014
4 PwC Global Airline CEO Survey 2014
5 Accenture Outlook, March 2012 – Making Cross-Enterprise Collaboration Work
About Vmoso

Vmoso is a cloud application for conducting virtual enterprise communication, mobile workgroup collaboration, and social business engagement. It unifies email, instant messaging, content sharing, workflow, and social networking under a cohesive experience, empowering users and their extended organizations to get more work done in significantly less time and at much lower cost. Visit www.BroadVision.com/Vmoso for more details.

About BroadVision

Driving innovation since 1993, BroadVision (NASDAQ: BVSN) provides e-business solutions that enable the enterprise and its employees, partners, and customers to stay actively engaged, socially connected, and universally organized to achieve greater business results. BroadVision® solutions—including Vmoso for virtual, mobile, and social business collaboration, and Clearvale for enterprise social networking—are available globally in the cloud via the Web and mobile applications. Visit www.BroadVision.com for more details.

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As BroadVision’s Vice President of Marketing and Business Development, Ty focuses on increasing brand awareness for Vmoso and other BroadVision products, building partnerships, and creating operational efficiencies across the enterprise.