Connecting People Better
A New Architecture for More Natural and Productive Online Experiences

Alan D. Greenberg
Steve Vonder Haar
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Introduction

Up to now online, one-to-many or many-to-many events (classes, webinars / seminars, marketing events) have been one-dimensional and limiting in their interactivity. A set of fledgling capabilities: streaming video, webcasting, two-way video conferencing, web conferencing – each has existed in its own turf and found its own (often similar or overlapping) use cases.

Executives, knowledge workers, and educators alike have worked with a broad range of these and other technology solutions – none of which thus far have adequately combined the reach of a large broadcast with the interactivity of a collaborative platform. Many of today’s technologies are outgrowths of the original audio conference call: what began as “let’s just ‘bridge’” audio together has become now “let’s just ‘bridge’” audio, video, and web capabilities into a large group setting – but at the lowest common denominator.

Common Technologies Today
This has resulted in some commonly deployed technologies that offer many benefits, and at least one piece of the puzzle needed for full-featured large-scale collaboration, but that may still limit flexibility and interactivity. Examples include:

- **Webcasting and webinars.** Typically these are one-to-many, with content going in one direction in a stage-oriented approach. Leveraging the broadcast metaphor, these events (provided by companies like ON24, Cisco WebEx Event Center, Citrix GoToWebinar, UStream, InterCall, and others) have generated most of their value by creating linear environments where value stems from disseminating a single thread of information to a sizeable online audience. While these events do provide forums for individuals to type a question for a presenter to read aloud or respond to via text or email, these environments are not viable for large-scale, interactive group communications. Even the means by which these platforms incorporate social media, which should enhance interactivity, may be interactive in name only: Twitter feeds (as an example) ultimately create an illusion of real audience engagement, but may not be a long-term, workable method to address an audience’s desire for true back and forth dialogue.

- **Web conferencing built for meetings.** These solutions (provided by companies like Cisco WebEx, Adobe Connect, Citrix GoToMeeting, Microsoft Lync / Skype for Business) usually allow groups to share common on-screen content (PowerPoint slides, applications, etc.) while talking via conference call or shared IP audio/video link. The text-based interactions that are possible are restricted to being either one-to-one or only one to a group, typically. These solutions excel for small group meetings, however, but do not support large events. Again, they are not viable for large-scale, interactive group communications.
Traditional two-way video conferencing with multi-way capabilities. Video conferencing (from companies like Cisco, Polycom, Blue Jeans Network, and Lifesize) has always been strong for small meetings, but the emphasis has been on talking head video, not content. Another problem with these platforms is their limited ability to have any kind of one-to-one interactivity outside of the larger group. It can start to look like “Hollywood Squares chaos” when you get very many people on a call. Even Google Hangouts as used for small events becomes chaotic and / or unsuitable for large-group interactivity¹ (not to mention challenging to enter) due to Google’s particular registration and account activation policies. In general, group video conferencing is better designed for small meetings than large-group activities, for several reasons: 1) open microphones may leave the possibility of inadvertent sounds or “bad actors” distracting or hijacking an event; 2) with size, there is greater chance of audio conflict – a large event still needs a lead “actor” on the stage; and 3) people have a natural reluctance to jump into a large group conversation if they are unsure who has the stage. Thus group video conferencing meetings simply are not suitable for large-scale, interactive group communications.

Virtual worlds. Those platforms that came closest to emulating the real world consist of online, virtual worlds like Second Life. The initial currency Second Life found was in education and as a consumer-oriented meeting place, though even IBM for a few short years was excited about Second Life’s use for business. Later, more “sanitized” business-oriented versions like ProtonMedia and AvayaLiveEngage emerged but thus far have failed to gain anything more than niche status. More recently a wave of online virtual trade shows / events came along as well, but all of these approaches have floundered. They all require computer-based representational “avatars” that have failed to catch on precisely because they are artificial. And they, like the other technologies, are not suitable for large-scale, interactive group communications.²

Table 1 compares and contrasts the large event capabilities of four of the major online collaboration technologies – with an emphasis on which technology supports varying levels of interactivity.

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¹ Beyond their maximum of 10 active participants.
² Virtual worlds do support large groups, perhaps more so than any of the other technologies discussed, but the unnatural nature of the experience introduces other deficiencies.
Note that not one technology “does it all.” Yet even those that scale the most, webcasting / webinars and virtual worlds, nonetheless have limitations when it comes to empowering presenters and participants to interact with one another. Similarly, web conferencing and video conferencing built for meetings may provide some degree of interactivity, say the ability to promote someone to presenter, but quickly can become hamstrung when it comes to large groups interacting. None of these technologies support individuals grouping themselves together in a user-centric, self-initiated fashion.

Other approaches to online community building may push communications into the on-demand-only realm. Some of these might be moderately interactive, such as threaded discussion boards, social media, and the like. But it’s the real-time component of knowledge sharing and community building that calls for new approaches.
What’s Important to Online, Real-Time Events?
For starters, live video is good. Wainhouse Research survey results indicate that two-thirds of respondents see live video as an important tool for building online community. But other WR survey data illustrates that video is not the only element important to users seeking an engaging online experience. When asked to identify technologies that are important in helping to create a more engaging online experience, overall survey respondents basically say they want access to a mix of live audio and video and other modes of interaction than typically are available “incrementally” or on a case-by-case basis during large events today. In almost equal measures, they see a mix of types of interactive technologies as “important” to their online experience. As shown in Figure 1, Instant Messaging is very or somewhat important to 74% of respondents – just a few percentage points fewer than the 81% for whom live video is very or somewhat important.

![Figure 1 Feature Importance for Fostering More Engaging Online Communications](image)

With this data in mind, those who make collaboration technologies meant to support large events face a challenge: how to deliver a single platform capable of offering scaled distribution of video and presentation content while enabling structured collaboration opportunities for attendees. Many legacy platforms offer some elements of these capabilities for large-scale events – but we are hard pressed to identify highly scaled platforms that integrate all of these capabilities in a single user interface.

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1,201 executives and knowledge workers participating in a fourth quarter 2014 survey fielded by Wainhouse Research.

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Connecting People Better

*Shindig* is one company we recently identified that is attempting to fill this market void, with a platform approach meant to power large-scale video chat events, classes, and communities. Shindig provides a venue that blends the attributes of centralized, large-scale web casting, webinars, and video conferencing with the flexibility of small-group collaboration solutions. The combination produces an online meeting experience unlike that offered by many other business communications solutions. Hosts can share the stage for face-to-face interactions with individual audience members before the entire gathering or can sidebar with participants privately. Meanwhile, unlike other video conference or webinar meeting technologies, audience members themselves are also able to network, discuss and socialize with one another in their own self-initiated private video sidebar chats just as they would naturally at in-person events.

![Figure 2 Shindig Presentation and Audience Members in Private Video Sidebars](image)

Large-scale events are very different in the online world than in the physical universe. While an audience in a real-world auditorium or large lecture hall is likely to be polite and quiet during a talk, no such guarantees exist in an online environment, where technology troubles can foster a greater risk of audience disruption. If the microphone of one attendee is inadvertently activated or if a user’s private texts are mistakenly distributed to all event attendees, a presenter can quickly lose control of the event. This is why features like push-to-talk microphone buttons and mute listener controls came along – to shield the presenter and the sanctity of the event.

But these technologies that protect the sanctity of the one-to-many presentation experience also end up interfering with the natural experience of event participants. In any event exceeding 15-20 participants, most capabilities meant to support interactions
between participants wind up isolating them. The larger the event, the harder it is to hold a sidebar chat, commune, comment, or share apart from the large group. And if participants do try to have these private chats, it becomes harder for them to track and manage those interactions.

In their defense, large-scale event platforms were created partly by necessity with the one-to-many, “sage-on-the-stage” model in mind. They could not consider how they might foster true collaboration and the “serendipity” made possible by chance or purposeful encounters in the physical universe. We explore in this paper some of the directions and possibilities made possible by a more democratic approach to large-event technologies, an approach that removes the constraints to interactivity created by many legacy one-to-many venues. What becomes possible includes peer bonding, casual ad hoc interactions, and the ability to discover and learn from others.

Methodology
Wainhouse Research conducted a feature review of the Shindig platform, comparing and contrasting its capabilities with the other major categories of collaboration described above. We also conducted two informal “sandbox” events in June, 2015 during which we tested the Shindig platform with a number of WR clients and end user stakeholders. Post event we queried attendees regarding their positive and negative impressions of the experience. The result is this candid assessment of pros and cons we find in the Shindig service – and a discussion of its differentiating capabilities.

Feature Review
Online interactions can be built in a multitude of approaches. Many these days are a blend of synchronous, real-time and asynchronous, on demand activities. By this we mean that they straddle multiple realms and must satisfy multiple presenter and participant / user needs. Any platform, as a result, needs to accommodate a mix of pre-registration and ad hoc capabilities for joining the event, and a mix of a single event or multiple, repeatable events. That’s before you even get started. Then there are event support and event interactivity features, and presenter features vs. participant features. In all cases they have their table stakes elements – the features that we have come to believe are essential after years of monitoring the online event and collaboration industry. The following two tables detail some of the basic considerations those deciding on an event platform likely are going to want included.

Presenter / Organizer Requirements
Some basic requirements for online events, many of which have grown in sophistication over the years, include a mix of administrative, real-time event, and platform considerations, as described in Table 2.
### Administrative Tools

<table>
<thead>
<tr>
<th></th>
<th>Event Tools</th>
<th>Platform Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-registration and RSVP system</td>
<td>Tools for managing presentation of content</td>
<td>Support for multiple participant and presenter devices, whether mobile clients or browser-based access</td>
</tr>
<tr>
<td>Question management or polling (pre-load if necessary)</td>
<td>Event-based question management tools</td>
<td>Recording and archiving for later replay</td>
</tr>
<tr>
<td>Easy invitations</td>
<td>Tools for promoting participants to presenter</td>
<td>Delivery of multimedia content</td>
</tr>
<tr>
<td>Brandable, customizable experience / backgrounds (aka “skins”)</td>
<td>Text / chat for public, group messaging</td>
<td>Integration with social media e.g., Facebook, Twitter, etc.</td>
</tr>
<tr>
<td>Ability to retrieve attendance data (pre-registrants vs. actual participants)</td>
<td>Text / chat for private, directed messaging to individuals</td>
<td>E-commerce capabilities (ticketing, collecting admission fees through PayPal or other merchant services)</td>
</tr>
<tr>
<td>Tools for analyzing viewership / usage patterns with pre-event / post-event reporting</td>
<td>Delivery from mobile devices (may require uploading content prior to an event)</td>
<td>Support for mixed PSTN / Voice-over-IP (VoIP) audio</td>
</tr>
</tbody>
</table>

**Table 2 Presenter / Organizer Requirements**

### Participant Requirements

A number of similar, sometimes overlapping capabilities are important to event participants as well.

<table>
<thead>
<tr>
<th>UX</th>
<th>Interactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy event registration and access (entrance and exit)</td>
<td>Ability to ask questions of presenters</td>
</tr>
<tr>
<td>Ability to control one’s own UX via settings and easy muting of video or audio</td>
<td>Ability to download content directly from UX</td>
</tr>
<tr>
<td>Ability to watch content live or on a time-shifted basis</td>
<td>Ability to become presenter to address an audience</td>
</tr>
<tr>
<td>Share presentation content / highlights with others via social media and / or email links</td>
<td>Text / chat for public, group messaging or private, directed messaging to individuals</td>
</tr>
<tr>
<td>Easy privacy safeguards (e.g., Do Not Disturb or Do Not Video Chat with me)</td>
<td>Ease of interacting with others (moving into and out of conversations and breakouts)</td>
</tr>
</tbody>
</table>

**Table 3 Participant Requirements**
Obviously producing or participating in online events is more complicated than Tables 2 and 3 suggest. But these comprise sets of requirements any organizer or event participant typically expect to find in today’s large-event platforms.

The Shindig Sandbox

Shindig Experience

Wainhouse Research held two “sandbox” events in June, 2015 with a mixed group of IT staff, event planners, educational network managers, educators, and corporate users of web conferencing and webcasting technologies. The experience of conducting an event in Shindig is decidedly different from typical webcasts, web conferences, and video conferences. In some respects, Shindig draws upon the best capabilities those approaches provide, in some instances improving upon them, in some instances not quite matching them in terms of video quality (e.g., lower frame rate). But as an emerging platform supporting different types of interactions, many may find the trade-offs Shindig has made worthwhile.

To best understand the Shindig service, one should experience it. Think of Shindig as enabling the online meeting equivalent of a large conference. Attendees have options for how to use their time when at the conference. They can engage in one-on-one or small group conversations with other attendees. Or — if a compelling presenter or video is featured on the main stage — they can turn their attention to the spotlighted speaker. The same options exist for visitors to a Shindig event. From the participant perspective, no constraints exist regarding video or text chatting with any other participant — as long as privacy settings permit “meeting and greeting” (see Figure 2). Video windows can be brought together to form groups for private conversations simply by single- or double-clicking and inviting others into sidebar conversations. Any participant can engage in private sidebars conducted via audio and/or video. And two options exist for private text-based chat: individual one-to-one, or small group chat accessible by a limited number of participants. Overall, Shindig supports up to 1500 event attendees at this time, but attendees are placed as they enter an event into “rooms” of no more than 20 participants at any single time. Even while in the rooms, attendees can listen to a spotlighted presenter and / or focus on their own private video sidebar or text chats — they can do either or both simultaneously.

Webcast / Web Conferencing Emulation

Even while attendees can focus themselves on private video sidebar or text conversations, main stage presenters also can deliver presentations to attendees. Presenters can show their own pre-produced videos and/or PowerPoint slides to the
entire audience. This enables a one-to-many style presentation consistent with traditional webcasts and web conferences.

While some webcasting / web conferencing platforms enable attendees to be promoted to presenters, the process is rarely simple in large events. The differentiation within the Shindig-enabled experience is that presenters can promote any attendee to “co-presenter” status naturally and intuitively – without searching through long lists of attendee names. (The Shindig platform even makes it possible for administrators to talk privately with attendees before they are put on the main stage, enabling the virtual equivalent of a “green room” where participants can be prepped and pre-interviewed before being allowed to speak to the large audience.) Any attendee may request to be brought on stage or given the “spotlight,” in a much more friendly and spontaneous fashion than is possible via other types of event platforms. Similarly, attendees can make comments or pose questions to the primary presenter that can then be seen and heard (if the presenter wishes) by the entire audience attending the event. The result is a more natural experience with more interactive Q&A sessions for presenters and attendees alike.

A filmstrip known as a “Mingle Bar” in Shindig parlance that appears on the lower portion of the screen enables a presenter to “connect” to any individual attending the event, no matter how large the audience has grown. (Participants can freely move room to room – an experience very different from how traditional breakout rooms work in web conferencing.) The individuals in each room can only see and sidebar chat with one another in that room (or they can switch between rooms at any time). And participants can see / hear general session presentation material while also engaging in private video sidebar sessions.

Shindig is attempting to reset the balance between host controls of the event and user controls. The host gets unilateral control of the stage, and some control of the user experience. This is less control over the user experience than is typically found in the more constrained webcasting / webinar, web conferencing, and video conferencing environments. A “Push to Full Screen” capability allows an administrator to control the participant experience, but any participant can override this function if so desired. In fact, the entire design of Shindig is to eliminate organizer or technological constraints and (in Shindig’s words) “show respect for the end user, neither making them juvenile nor thwarting their natural desires.” Consequently, Shindig does not entertain built-in breakout room creation or sequestration of participants by the organizer; instead, the company believes it is achieving the same goal by encouraging educators, trainers, and

I loved the concept of speakers going on stage and the easy ability to invite others to present or have sidebars. IM and question functions were also easy.

Jerry M., Service Provider
event hosts to provide direct guidance (say posting a document listing breakout group mixes) and then leaving it to participants to group themselves accordingly.\(^\text{4}\)

As in web conferencing products, participants can virtually “raise their hand” during a session to draw the attention of the main presenter. The primary purpose of this function is to request the stage – much as an individual in a meeting or lecture hall might raise a hand, asking for the floor. Organizers also can present written audience text questions to the entire audience. And as in web conferencing (but not web casting / webinar) products, participants can text chat privately or to an entire group (see Figure 3). We found the text chat to be useful and easy to manage, though a few sandbox participants did not immediately understand how to manipulate and reposition their text chat “pods.” We suspect this would come with greater familiarity with the service.

Event organizers typically seek flexibility in how they stage events. Some organizations seek an e-commerce element and the ability to charge for events. Others want them made public to all. Shindig offers the flexibility of either approach: public or private events, password protection as needed, and integration with e-commerce sites like PayPal.

\[\text{Figure 3 Shindig Instant Messaging}\]

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\(^{4}\) WR believes this is neither a positive nor negative. Some educators accustomed to “control” over their classes might prefer the ability to manage this function more closely, but Shindig is staying true to its democratic design center in not building in this functionality.
Video Conferencing Emulation
As in video conferencing products, individual participants can see one another. But they are audio “muted” as it were until they either are brought to the stage or join or are joined into a video sidebar. This approach improves upon the fact that most video conferencing products do not support private video chats. Users must leave a call / meeting / event and make a separate call, then return to the existing event as appropriate. But as in other video conferencing and web conferencing products, Shindig allows for privacy settings: it is easy to disable (or enable) one’s video or audio based on personal preferences and desire or lack of desire to interact with others.

Virtual World Emulation
Having experienced virtual world technologies like Second Life, ProtonMedia, and AvayaLiveEngage, Wainhouse Research notes that there is one similarity between Shindig and virtual world technologies: they are both designed to democratically enable mixes of event participants to mingle, move about, and connect to others without the constraints one often finds in legacy conferencing services. Both types of platforms support privacy controls and the ability to text chat with others. And both types of platforms support the ability to deliver other media, such as documents and video clips. Fortunately, that is where the similarities end. Virtual worlds are built around a representational human interface that involves avatars—one reason for their inability to gain traction even in most business settings. By constructing Shindig using the more natural element of the individual’s video representation, Shindig has removed the artificial nature virtual worlds are based upon. While we don’t wish to “privilege” video as the medium, the proof is in how much more comfortable business users (and even consumers) have become with video as a representative medium.

The Shindig Sandbox Experience
Organizer Perspective
From an organizer perspective, Shindig has placed management controls that resemble some UX capabilities we have seen in broadcast video environments. Overall the UX is architected with the goal of fostering maximum interactivity and democracy among various communities with differing needs. The beta version of the service included the ability to monitor participants in the event, to monitor a specific breakout room, to search breakout rooms, to receive participant information, to play third-party video content, to screen share, and more. Some training and practice are necessary in our opinion to optimally take advantage of organizer capabilities, and we found the experience to not always be clear cut and intuitive. Having said that, we only conducted ...
two Shindig sandbox sessions and believe that with some practice, an event organizer would become comfortable with the functionality.

![Figure 4 Shindig Administrator View](image)

**Participant Perspective**

Most of the participants who entered the Shindig sandbox sessions found these to be the capabilities particularly unique and noteworthy:

- Anyone with a webcam can be a presenter quickly and in an ad hoc fashion, without formal “upgrading” of status
- Presenters can private video chat with anyone (sidebar chats) on an individual or group basis
- Any users can private video sidebar chat with anyone on an individual or group basis
- Participants can move from group to group during large-scale events.

Wainhouse Research asked event attendees to provide qualitative feedback to a structured set of questions based on their experience of the Shindig service. Questions ranged from quality of welcome experience, ease of webcam / microphone settings, ability to see / interact with presenters or other participants, and would they like using such a service (as presenter or attendee) of events.

More than a few participants commented on that singular ability to “powwow” with others in sidebar conversations. While they may be accustomed to text chatting during
web or video conferences, the ability to join sidebar conversations was the single most praised feature.

Table 4 summarizes attendee feedback based upon responses during and post-event (via email).

<table>
<thead>
<tr>
<th>Shindig – Participant Feedback</th>
<th>Excellent</th>
<th>Appealing</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of welcome experience</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of webcam / microphone setup</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability to interact with presenter</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability for organizer to access participant view</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability to hear audio</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability to identify other event participants</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to see video of other participants</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to interact with other participants</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to invite others to participate in private video sidebar or text chat sessions</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of experience in listening to audio</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability to ask questions</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy settings</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>RSVP notifications</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Shindig – Participant Feedback</td>
<td>Excellent</td>
<td>Appealing</td>
<td>Average</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>Ability to post to social media</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 Shindig Sandbox Participant Feedback

Is the Shindig UX completely frictionless – the holy grail of the technology industry? No, but it is rare to find any UX completely frictionless. And the appeal of any technology comes down to disparate users with disparate tastes. One attendee who likes the idea of connecting with “any individual and / or groups of users, and the different media in which one can make those connections” nonetheless also sought a more static UX. This individual’s comments, who admitted post-event that she prefers structured user experiences rather than fluid, constantly changing experiences, suggests that the very idea of democratizing a UX may be of mixed appeal to some users.

Other “dislikes” expressed by Sandbox attendees ranged from “audio sometimes overlapping with the presentations and presenter” to issues surrounding inability to control who pulls one into a sidebar video chat. (This can be controlled via privacy settings that are not difficult to identify.) Apart from the routine audio / video issues one can expect from disparate endpoints and technologies, few other dislikes emerged from the attendees. For the most part the UX for an attendee is no more challenging than typical web or video conferencing controls, and in some instances it is even easier to use. Overall, Shindig received kudos from attendees for its differentiated, novel features.

Table 5 illustrates our Moderator perspective.

<table>
<thead>
<tr>
<th>Shindig – Moderator Feedback</th>
<th>Excellent</th>
<th>Appealing</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to see all participants while presenting</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Ability to interact with participants</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to broadcast a video clip</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to move from</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I liked the ability to join side conversations with others easily. Moving from one conversation to the next was quick and intuitive. I do think there is value in supporting the ad hoc, one-to-one conversations.

❖ James M., IT Manager, University
Shindig – Moderator Feedback

<table>
<thead>
<tr>
<th>Administrative module to event window (return to audience)</th>
<th>Excellent</th>
<th>Appealing</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to communicate with other presenters via non-public channels</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to gauge engagement of participants</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question management tools</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability to invite others to participate in private video sidebar or text chat sessions</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio meter</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability to upload and present pre-recorded video</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to push presenter / content to full screen</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Overall experience of producing a “sandbox event.”</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 Shindig Sandbox Moderator Feedback

Our overall experience as moderators is that the Shindig “green room” is relatively comfortable but not always intuitive. As stated earlier, it takes some getting used to. But we found it extraordinarily fluid to move from presenter role to session attendee role – one of the hallmarks of democratic events. The reason we analogize Shindig to the best of virtual worlds, in fact, is the ease of movement and casual nature of the experience. There is no other experience quite like it other than Second Life, ProtonMedia, AvayaLiveEngage, etc., and for all the reasons described earlier, Shindig is superior to the virtual world concept. The approaches it is bringing to

Overall, I liked the interface, and I think it would work well for managing groups and possibly keeping people more engaged with a meeting than other means. Side chats in the Shindig interface are better than losing people to their own off-topic distractions outside the meeting interface.

Bruce C., Marketing Writer, Technology Firm
the table are likely to be more appealing and successful because it is more natural and human.

<table>
<thead>
<tr>
<th>Large Event Feature or Capability</th>
<th>Shindig</th>
<th>Webcasting / Webinars</th>
<th>Web conferencing</th>
<th>Video conferencing</th>
<th>Virtual Worlds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidebar video / small-group discussions</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Presenter sees all participants</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Sometimes</td>
<td>No</td>
</tr>
<tr>
<td>Presenter can promote others to presenter status</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Individual-to-individual private video sidebar chats</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Individual-to-individual text interactions</td>
<td>Yes</td>
<td>No</td>
<td>Sometimes</td>
<td>Sometimes</td>
<td>Yes</td>
</tr>
<tr>
<td>Breakout groups</td>
<td>Yes</td>
<td>No</td>
<td>Sometimes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 6  Shindig Contrasted with Alternative Collaboration Technologies

In fact, what differentiates Shindig is its approach – from the ground up – to enabling large event participants to break through the constraints of interacting not just with a presenter or event moderator, but with anyone. This is radical, and runs counter to many of the norms users of collaboration technologies have come to expect. Events often are planned to be one-way (and hierarchical by nature, with control resting in the hands of presenters), and those aforementioned constraints are designed to “ensure” that attendees “pay attention.” What is radical about Shindig is that it places control of the attendee experience squarely in the hands of its event participants. As the company told us, “Freedom is the hallmark of the platform. It is better that someone talk to someone else during the event than that they pop open another window and do something else entirely. The notion that because people are constrained from talking to other people achieves the result that people will then pay more attention to material that they otherwise are not interested in is a

Shindig provides a creative way to interact with others within a meeting like no other service is offering.

Bradley M., Consultant, High Technology Services

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fallacy. This is what turns events from being “sleepers” into events that I’ve got to be a part of – because I am a contributor.” The goal, thus, is to enable and mimic the hierarchy of communications activities people use in the physical universe (from direct speech to whispering and asides) and give autonomy over where individuals direct their attention and with whom they engage. So from placing Privacy options into the hands of users, to placing the power of interactivity into those same hands of event participants, Shindig clearly is placing a lot of trust in the ability of event managers to trust their event participants to benefit from the platform flexibility. So far the feedback is positive that this new approach has appeal.

Platform Use Cases

Use cases for Shindig will vary by organization. It already has found some vocal proponents, from Leanin.org to TheStreet.com, from the Economist to a variety of colleges and universities. Its video sidebar / group room capabilities make it instantly appealing to discerning, thoughtful users where dialogue and interactivity rank as high as event facilitation. Its ease of participant entry should make it appealing to any of the following uses cases in a wide variety of industries:

- Brainstorming
- Product launches
- Teaching and learning
- Professional development
- Collaboration
- Sales and marketing events
- Formal and informal events
- Investor relations
- Media and publishing
- Focus groups (suggested by one of the event participants)
- Town hall meetings
- Facilitated seminars
- Online trade shows

Following in the tradition of the Internet, which democratized communications in so many ways, Shindig is bringing to the business world a means of democratizing how individuals collaborate and interact online. And it addresses some of the issues educators and event managers have faced for years: how to handle small group breakout sessions. Sidebar or breakout sessions in traditional video conferencing, web conferencing, and webcasts either are insufficient or do not exist at all. Its most compelling is its ability for small group breakouts. This feature alone would be seen as "hot" for education. Why? Have you ever tried to attempt sidebar or group-breakout sessions in a traditional video conference? Our professors have tried (despite our counsel otherwise) and it just doesn't work well.

- Mark H., Video Conferencing Specialist, University
Conclusions

Shindig’s approach is an emerging representative of the democratization of video and one-to-many and many-to-many communications. Video platforms to date have been about hierarchy, sage-on-the-stage, one-way transfer of information – often in a talking heads format. Webcasting and web conferencing introduced the idea of shared content, but continue to place constraints on interactivity. And virtual worlds remain artificial to most.

What Shindig brings to the table is a platform with a multi-way flow of information and collegiality. What Wainhouse Research and many of the sandbox participants most like is the ability to have video sidebar and room “groupings” unlike any we have ever seen before (other than the more exotic virtual world environments – which have failed to achieve critical mass). Thus Shindig has created the opportunity for what we might call a class of “online event cake eaters” who get the best of two digital worlds: they have opportunity to keep tabs on a general large-scale online event while engaging in individual conversations with important contacts / colleagues / teammates. Perhaps the biggest challenge facing Shindig will be in developing a cadre of online meeting multi-taskers who understand the technology and create viable strategies for leveraging Shindig’s unique combination of event capabilities to their fullest extent.

From a technological perspective, we believe a Shindig-like platform should be built on today’s next-generation technologies like HTML5 and WebRTC, and not Flash. But there is no one technology to date that has been used for large-scale video events quite like the kinds Shindig supports. In a Balkanized world of browsers, codecs, and encoders, Shindig went for its initial release with the solution that got it from Point A to Point B most quickly. It is now one of many platforms mid-stream and on their way to next generation capabilities, and we expect to see Shindig – and many others – continue to attempt to drive down the barriers to interactivity in large events.
About the Authors

Alan D. Greenberg has more than 25 years of experience as consultant, analyst, communicator, and strategist in the field of educational and collaborative technologies. He has authored dozens of reports, analyses, research notes, and profiles related to distance education, online learning and e-Learning, virtual worlds, web and video conferencing, interactive whiteboards, Learning Management Systems, and lecture capture, and he is editor of the free Wainhouse Research Blog. Alan also consults to colleges and universities as well as regional networks on matters related to adoption, policy, and deployment of these products. He can be reached at agreenberg@wainhouse.com.

Steve Vonder Haar

Steve Vonder Haar has focused coverage on the enterprise streaming and Webcasting sector for 15 years. Prior to joining Wainhouse, Steve served as Research Director of Interactive Media Strategies where he authored more than 100 research reports and produced more than 150 Webcasts that addressed trends shaping the adoption of online audio and video in business communications. Previously, Steve worked as Director of the Media and Entertainment Strategies for the Yankee Group. He holds Bachelor degrees in journalism and economics from the University of Missouri Columbia and a Master’s degree in Business Administration from the University of Texas-Arlington. Based in Arlington, Texas, he can be reached at svonder@wainhouse.com.

About Wainhouse Research

Wainhouse Research, www.wainhouse.com, is an independent analyst firm that focuses on critical issues in Unified Communications and Collaboration (UC&C) and collaborative educational technologies. The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings.
About Shindig

Shindig is a turnkey solution for online video chat events. Its unique technology offers the dynamics of an in-person event at internet scale. Shindig enables a host to give a video conference, lecture, seminar, interview or media event in front of an online audience of thousands. Hosts can share the stage for face-to-face interactions with audience members before the entire gathering or sidebar with participants privately. Meanwhile, unlike other video conference or webinar meeting technologies, audience members themselves are also able to network, discuss and socialize with one another in their own self-initiated private video chats just as they would naturally at in person events. For more information visit www.shindig.com.