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Lucy Chin

Min Hu

Allie Farrell

Lindsey Pawlowski

Washington University in St. Louis, lpawlowski@wustl.edu

Ellis Ballard

Washington University in St. Louis, eballard@wustl.edu

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An Overview of Platforms to Support Online GMB

Lucy Chin,^{a,b,d} Min Hu,^a Allie Farrell,^d Lindsey Pawlowski,^d and Ellis Ballard^{c,d}
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METHODS BRIEF SERIES 2.02

The COVID-19 pandemic ushered in the new reality of remote working and learning, forcing group model building practitioners to make an abrupt shift to online workshops. Like our peers, the Social System Design Lab (SSDL) at Washington University in St. Louis confronted this challenge by exploring what tools existed for adaptation and continued collaboration. The shift has not been easy, but it has revealed new insights that suggest areas to leverage the strengths of online GMB long after the pandemic comes to an end.

The purpose of this brief is to review a number of online platforms that group model building practitioners have used since the rise of remote work, and to suggest promising combinations for groups who are hoping to implement their own online system dynamics work.

+ CONSIDERATIONS

Group Model Building (GMB) workshops present a distinct set of challenges from other meeting formats. Unlike webinars, staff meetings, or focus group discussions, GMB workshops convene individuals from different positions and/or organizations to reflect on their own assumptions and beliefs and to collaboratively develop maps and models that achieve system insights.

At in-person GMB workshops, a team of facilitators can choreograph a session that leverages the participants' common experiences, expectations, and norms of in-person collaboration and learning. However, online GMB workshops often exist in new spaces where participants have limited prior experience and established norms. It's difficult to directly translate the coordination and choreography of in-person workshops to virtual settings (see Brief 2.1 for an overview of opportunities and challenges that facilitation teams can consider when facilitating online GMB workshops). Choosing an appropriate online platform can help the facilitation process and alleviate some of these challenges.

Online collaboration platforms offer a variety of different tools and services (see table below), and while trial and error present one way to determine which platform to use, it can be helpful to choose a platform based on the specific activities and goals of the online session.

Some questions that facilitators and core modeling teams may take into consideration include:

- **What is the primary purpose of the chosen SD activities?** Is each activity divergent (generating many different ideas) or convergent (coming together around an idea)? Does the platform have functions to support these intended purposes?
- **Is it likely that people know and/or have experience with this platform already?** This may lessen the amount of time that you need to spend providing platform-specific training. On the other hand, if people aren't familiar with the platform, it is important to think about how long it might take someone to learn and get comfortable using the necessary features.
- **What is the group's capacity in using multiple platforms?** Many of the platforms work independently of each other. If the standard is to work in Zoom and complement its functionality with another platform, it is important to consider the choreography of switching between platforms. Facilitation teams should be large enough in order to have the capacity to navigate and troubleshoot the platforms. Facilitation teams should also be aware of what capacity participants have in terms of navigation, as it may be impossible for a participant to engage on multiple platforms if they are using a mobile device or tablet.
- **What is the group's willingness to try a new platform?** Different groups have different comfort, energy, and patience levels in trying new platforms. What are the norms of this group? Will participants be excited to learn a new platform they can integrate into their work beyond the session? Or will participants be frustrated by the prospect of taking time to learn something new?
- **What accessibility features will you need to engage all participants?** Different platforms have different accessibility features from live captioning to compatibility with assistive technology, etc. Some platforms require an account or log-in, have differing capabilities in the free vs. paid versions, or are only compatible with certain operating systems. Some platforms require more internet bandwidth than others. What features will meet the needs of your participants?

+ EXPLORATION OF EXISTING PLATFORMS

Over the past year plus, online platforms for collaboration have proliferated. Some organizations are using platforms that have been around for a while, such as Google Slides and WhatsApp, in order to collaborate, while other groups have needed to explore options for more specific or expansive online tools. The table on the following page provides an assessment of some of the most common online collaboration platforms and their correspondence with the most common online GMB workshop features.

+ PROMISING COMBINATIONS

While each platform provides an independent set of tools and facilitation features that can support online GMB, the SSDL has had positive experiences using multiple platforms at the same time in order to enhance information sharing, accessibility, and engagement. Some promising combinations we've used over the past year include: Zoom and Google Slides; Zoom and Miro or Mural; Zoom, Google Slides, and Mentimeter; and, for asynchronous work – Google Drive or Microsoft Teams and Padlet.

Even as the frequency of online sessions fluctuates in the months to come, online GMB is likely here to stay in some forms. Best practices and online platforms that are available to researchers, practitioners, and community members will continue to proliferate and change how communities learn about and engage in system dynamics exploration and modeling. We hope that this brief provides a jumping off point for exploring what is possible in the realm of online GMB and hope that communities of practice can continue to add, edit, and expand on the initial content provided here. *Note: the information in this table was current as of Fall 2021*

Platform	Google Slides	Microsoft Teams	Kaltura - EdVP	Kumu	Mentimeter	Miro
Platform Description	An online presentation app allowing users to create and format slide decks and collaborate with other users	A hub for team collaboration with video-conferencing, document sharing, and chat features	A tool for sharing large video files and creating activities related to videos (e.g., quizzes, screen recording)	A platform for collaboratively creating complex relationship maps (including CLDs) and presentations	A platform that offers tools for interactive presentations (e.g., live polls, quizzes, word clouds)	An online whiteboard platform where users collaborate for brainstorming and visualization projects
Free Version Available?	Yes	Yes	Not EdVP; there is a free Kaltura Community tool	Yes	Yes	Yes
Capabilities of Free Version	Create and present slide decks as one user or in collaboration with others	Video calls and screen sharing are available, but limited to 60 minutes	Community Edition (free version) is primarily used for video management, publishing, collaboration and sharing	All projects public, can transfer maps into Kumu-based presentation; no limit on project collaborators, none can be view-only	All tools are available, but free users are limited in how many activities they can create and embed into presentations	Max of 3 editable boards, public only, access to premade templates, link sharing with users is allowed
Cost of Paid Subscription	Business Starter - \$6/user/month; Business Standard - \$12/user/month; Business Plus - \$18/user/month	Microsoft 365 Business Basic - \$5.00 per month/user; Microsoft Business Standard - \$12.50 per month/user	Plans and costs are customized for user team; no standard pricing and usually sold in an organizational package	\$10/month per workspace with unlimited users + \$20/month per private project (public projects free); EDU discounts	Basic - \$9.99/month; Pro - \$24.99/month; EDU discount available	Team (2+) - \$8 per month/user; Business (5+) - \$16 per month/user; EDU discount available
Facilitation Tools	Simultaneous editing (text, drawing, integrating other media content) by all users, leave comments within presentation	Screen sharing, meeting recording, divide users into channels, chat with users, make calls to users, integrates with online Microsoft tools	Develop activities based on videos hosted on EdVP – video quizzes, screen recording	Project owner can invite collaborators & feedback on certain parts of the map; can develop unfolding presentations to share publicly	Can integrate the following into presentations – Live polling, word cloud, quizzes, Q&A; compatible with Microsoft Teams	Facilitators can: time or hide features, bring users to one board area. Users have simultaneous editing & can comment on features post-workshop
Recommended SD Application	Presentations, GMB Activities, Some Modeling	Presentations, Discussion	Presentations	Presentation, Modeling, GMB Activities	Presentation, Brainstorming + Some Divergent GMB Activities	Presentations, GMB Activities, Modeling

Platform	Mural	Loopy	Google Jamboard	Padlet	Zoom	MindMeister
Platform Description	An online collaboration platform where teams can brainstorm & do data visualization/design thinking	A tool for systems thinking that allows users to draw and animate causal loop diagrams	A tool for visual collaboration where users can interact and share ideas	An online bulletin board tool with a number of different layouts for collecting ideas and information	Real-time video conferencing with break-out rooms, screen-sharing, chat, survey, and annotation tools	An online mapping tool made to capture, developed, and share ideas visually.
Free Version Available?	Yes	Yes	Yes	Yes	Yes	Yes
Capabilities of Free Version	Without education access, free trial only last for 30 days	Tools for CLD creation: variables with different colors, labels/text boxes, and arrows; animation of loops	Create virtual whiteboards with drawing and sticky note capabilities	All layouts are available for free users; maximum of three boards, all public	Meeting features are available for all levels, but there are participant (100) limits and time limits (40 minutes) for free accounts	Create and store up to 3 mind maps; some features are not available unless user has paid subscription
Cost of Paid Subscription	Starter (1+) - \$12 per month/user; Plus (10+) - \$20 per month/user; Free for university staff and students with application & approval	None (Program is open source and public domain)	Business Starter - \$6/user/month; Business Standard - \$12/user/month; Business Plus - \$18/user/month	Padlet Pro Individual \$8/month; Padlet Backpack for schools - \$2000/year; Padlet Business - \$12 per month/user or \$99 per year/user	Pro - \$149.90 per year/license; Business - \$199.00 per year/license	Personal - \$4.99 per month/user; Pro - \$8.25 per month/user; Business - \$12.49 per month/user; EDU discount available
Facilitation Tools	Laser pointers + timers, facilitators can hide features & bring all users to one area. Private mode for individual work, with public share options	Works on tablets, link sharing (but not same-time collaboration) and ability to embed into website	Write, draw, and add notes	Users can add any file type to a Padlet board; participants can edit simultaneously	Breakout rooms, meeting recording, live closed captioning, chat feature, screen share and annotation	Create maps and share with other users, users can make comments
Recommended SD Application	Presentations, GMB Activities, Modeling	Demos, GMB Activities, Some Modeling	Presentations, GMB Activities, Some Modeling	Some GMB Activities	Presentations, Discussions, Chat, Some GMB Activities	Some GMB Activities

Other Platforms: *isee Exchange, Explain Everything, Nimbus, Goodnotes 5, Loom, Notion, Evernote, Dropbox Paper.*

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+ ABOUT THE SERIES

Social System Design Lab Methods Briefs are short, digestible notes on applications of system dynamics and systems thinking in community settings. They are meant to capture and share out our current thinking on core ideas related to the practice of system dynamics modeling in community and organizational settings.

“Series 2: Online Group Model Building” focuses on sharing reflections and lessons learned from a year of experimenting with, testing, and facilitating online group model building workshops during the COVID-19 pandemic. Briefs in this series include:

- Online GMB: Challenges, Opportunities, and Barriers | **2.01**
- An Overview of Platforms to Support Online GMB | **2.02**
- Facilitation Team Roles in Online GMB | **2.03**
- Engagement and Relationship Building in Online GMB | **2.04**

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