One of the best ways to realize the potential of group support systems is to learn from its failed implementations.

Meetings are a ubiquitous feature of modern organizational life, where problems are so complex that no one individual has the information and experience to solve them alone. However, the difficulties of teamwork range from poor preparations to vague follow-through, from loud talkers to free riders. Studies suggest that more than half the time spent in meetings is wasted. Consequently, some organizations have turned to group support systems (GSS)—a set of software tools for structuring and focusing the efforts of teams working toward a goal. With GSS, people share, organize, and evaluate concepts, make decisions, and plan for action. GSS users may work face-to-face or across the globe. Their contributions, anonymous or identified, are available for later recall.
Research shows that, under certain circumstances, GSS users exchange more information and develop more creative solutions while cutting project hours by 50% and cycle times by even more. Consequently, it might be tempting to see GSS as a silver bullet, a cure for most meeting problems. However, like any tool, GSS must be wielded with intelligence and skill to produce useful outcomes. Over many years, across many organizations and tasks, we have experienced our fair share of GSS successes and failures. To realize the potential of GSS, we must understand when and why GSS meetings fail. Unfortunately, failure stories are absent from most reports of GSS field studies [2].

Here, we offer exemplars of GSS failures and recommend best practices to help ensure GSS success. This investigation considers success from the participants’ perspective, for without participants there would be no success from any perspective.

We started with our own unsuccessful GSS cases, supplemented by written and oral accounts from a dozen colleagues. We contacted the international GSS community via the GSS-L and ISWORLD emailing lists (about 3,500 people), asking what factors may lead to GSS failure, and for personal accounts of GSS failures. We interviewed respondents with interesting stories to elicit and document details. We guaranteed
anonymity and most facilitators responded frankly, ruefully admitting their own blunders. Table 1 summarizes 15 selected exemplars of GSS failures.

We analyzed the collected cases using grounded theory coding techniques [3] to identify discrete causes and consequences of GSS failure. The elements were interpreted and organized into five categories of causes for GSS failures and three categories of consequences.

**Causes of GSS Failure**

Sometimes a combination of problems caused GSS failures, while at other times one problem was sufficient to wreck the outcome (Table 2).

**Problems with process design.** With GSS, participants often contribute their thoughts in response to a written question or prompt. In several cases, the wording of the prompts was vague or open-ended, with participant responses too general to be useful. In other cases, the prompts were too specific, eliciting massive detail where synthesized abstractions were required. Meanwhile, in Case 11, the introductory activities consumed half the total engagement time. One participant said she did not contribute certain ideas because she wouldn’t have had time to explain them.

Some GSS processes did not include time for oral discussion of the concepts developed during electronic brainstorming. When GSS activities went straight from electronic brainstorming to electronic voting, some participants felt “railroaded,” sensing their ideas had not received a fair hearing. In Case 5, the participants raised several sensitive issues, but the convener was afraid to address them, insisting the process move forward without oral discussion. Subsequently, several participants typed rude, disruptive comments into the GSS and the meeting was suspended.

**Problems with goals.** One GSS veteran remarked, “You can wander around lost in a regular meeting for three hours before you find out you don’t understand the goal. In a GSS meeting, if you don’t have a goal, you’ll have a train wreck in 10 minutes.” The convener in Case 2 had only a vague notion of the desired outcome. The participants felt their time was wasted, and complained, “next time there should be proper meeting goals beforehand.” In Case 9, the participants felt they were generating many contributions, but had no basis for determining which ideas were useful. In the end they felt “the sessions did not contribute to the project at all.”

Problems also occur when the convener and participants have different understandings of the goal. In Case 5, the convener wanted participants to address questions regarding the improvement of work practices, while participants, who were satisfied with work practices, wanted to oust their boss. Neither the convener nor the participants deemed the interaction a success.

Case 14 exemplifies several others where the convener deliberately misled the participants about the goal of the GSS engagement. The participants represented 16 research laboratories. The convener, a program manager in a funding agency, told the researchers their grant proposals of $1 million or more had been approved, and invited them to a distant city to participate in a face-to-face GSS session “to create a research roadmap for the program.” After they arrived, the participants were told that, in fact, their funding had not yet been approved. They were told to receive

![Table 1. GSS failure cases.](image-url)
funding they must find ways to synthesize their single-lab projects into collaborative multilab projects. Protests and outrage gave way to grudging compliance, but not to acceptance of the results.

In several cases, the convener had already decided on an outcome, but tried to use the GSS to trick the participants into thinking they had made the decision themselves “so they will feel ownership of the outcome.” In none of these cases did the GSS participants arrive at the outcome desired by the convener. In Case 13, the convener worked out an annual budget, then asked the group to prioritize spending issues and to decide how money should be spent on each item. When the group arrived at a different budget, the convener overrode their decision, saying, in effect, “Here’s why what you suggested won’t work, and here’s how I’m really going to do it. I just wanted you to understand the issues behind my decision.” The participants rebelled. A short time later, the convener lost a no-confidence vote, and was forced to resign.

Conflicts of interest between the convener and the participants may also cause GSS failure. In Case 7, the convener, a ministerial representative, expected the participants, representing external stakeholder groups, to share their thoughts about proposed climate control measures. However, none of the stakeholders wanted to reveal their own positions; they only wanted to learn the positions of the other stakeholders. As a result, no one contributed anything meaningful to the online interaction.

Problems with technology. In Case 3, powerful stakeholders gathered to develop R&D priorities for the construction industry. A problem with a hub caused the whole network to fail. While participants chatted and heckled, technicians spent 90 minutes trying unsuccessfully to fix the problem. Ultimately, the meeting was cancelled.

Not all technology problems are technical in nature. In Case 12, a financial institution decided to use a GSS to address a problem of the utmost sensitivity. Economic risks and political stakes were very high. Despite reassurance, the participants could not be convinced their contributions would remain totally anonymous, so they rejected the technology.

Sometimes participants demand anonymity, usually when there might be a political cost to expressing an unpopular idea. At other times, they demand that contributions be identified, when the expertise of the contributor is important, for example, or to assign responsibility for action items. Participants sometimes found anonymous communication to be too impersonal. One participant in Case 1 requested that all online communication be identified so as to increase the credibility of contributions.

Problems with participants. Participants themselves may also be a source of problems. In Case 6, there was a huge knowledge gap between scientific experts and laymen. The experts felt frustrated trying to make scientific explanations, while the laymen were annoyed by arcane jargon. GSS engagements may also be unsuccessful when key stakeholders are absent. In Case 10, key stakeholders were not invited. As a result, attendees did not take the meeting seriously, and spent much of their time fingerpointing at the absentees instead of discussing the issues constructively. Similarly, the goal in Case 11 concerned at least six stakeholder groups, but only one showed up. The group did not have sufficient knowledge mandate to complete the task. Failure to acknowledge political conflict can also sink a GSS effort. In Case 15, the facilitator was not aware of infighting between 25 directors and the executive vice president. Anonymous GSS brainstorming produced some nasty bloodletting and fingerpointing. Soon thereafter, the executive VP got up and shouted at the participants to stop typing derogatory things.

Problems with the facilitator. In Case 9, all the participants, including the convener, were very dissatisfied with the facilitator, who “offered his own opinion too often, wanted to participate too much himself. He had a tendency to talk and explain things to us (the experts) that we knew more about.” The facilitator in Case 8 indicated she had been incapable of controlling the group, and had designed the meet-

<table>
<thead>
<tr>
<th>Nr</th>
<th>Description</th>
<th>Occurrences</th>
</tr>
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<tbody>
<tr>
<td>1.1</td>
<td>Inarticulate agenda; poor questions and prompts elicit useless input.</td>
<td>2</td>
</tr>
<tr>
<td>1.2</td>
<td>Unbalanced agenda; too much time spent on less relevant activities.</td>
<td>2</td>
</tr>
<tr>
<td>1.3</td>
<td>Agenda did not include sufficient time for discussion.</td>
<td>3</td>
</tr>
<tr>
<td>2.1</td>
<td>Goal poorly defined by the process owner.</td>
<td>5</td>
</tr>
<tr>
<td>2.2</td>
<td>Process owners do not understand participants’ perception of problem.</td>
<td>3</td>
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<tr>
<td>2.3</td>
<td>Participants are misinformed about true purpose of engagement.</td>
<td>5</td>
</tr>
<tr>
<td>2.4</td>
<td>Conflicting expectations about meeting content.</td>
<td>5</td>
</tr>
<tr>
<td>2.5</td>
<td>Conflicting perception of need for meeting.</td>
<td>4</td>
</tr>
<tr>
<td>3.1</td>
<td>Technology does not work or breaks down.</td>
<td>2</td>
</tr>
<tr>
<td>3.2</td>
<td>Anonymity distrusted resulting in technology rejection.</td>
<td>1</td>
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<tr>
<td>3.3</td>
<td>Anonymity disliked resulting in reduced or poorer communication.</td>
<td>4</td>
</tr>
<tr>
<td>4.1</td>
<td>Experts from non-overlapping areas of expertise.</td>
<td>2</td>
</tr>
<tr>
<td>4.2</td>
<td>Key stakeholders are not present or invited.</td>
<td>3</td>
</tr>
<tr>
<td>4.3</td>
<td>Conflicts and politics in the group are not recognized.</td>
<td>1</td>
</tr>
<tr>
<td>5.1</td>
<td>Poor personal skills.</td>
<td>1</td>
</tr>
<tr>
<td>5.2</td>
<td>Facilitator inexperienced or incompetent.</td>
<td>3</td>
</tr>
<tr>
<td>5.3</td>
<td>Facilitator cannot get the group ‘moving’.</td>
<td>2</td>
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Table 2. Causes for GSS meeting failures.
Like any tool, **GSS MUST BE WIELDED WITH INTELLIGENCE AND SKILL** to produce useful outcomes.

GSS Failure Consequences

A failed GSS engagement may not always be immediately recognized as a failure. Often, dissatisfied participants only complain after the engagement is over. At other times, participants start rebelling while the process is under way. An overview of symptoms for ill-fated GSS meetings is presented in Table 3.

Participants rebel. One of the ways in which participants may rebel during a GSS meeting is by flaming, that is, writing vitriolic, personal anonymous verbal attacks, calling people names, using foul language, and so on. Although flaming is common with student groups, experience shows it rarely happens in the workplace. Of the cases studied, critical levels of flaming occurred in Cases 8, 10, and 15, effectively halting those meetings. It appears that flaming occurs when there is a conflict in the meeting environment (regarding content, meeting necessity, or in the group itself) or participants feel a strong urge to complain about something. In these situations, the anonymity provided by the GSS provides too good an opportunity to miss.

Another rebelling symptom concerns the agenda—the participants want to discuss and decide among themselves which steps should be taken during the meeting. This symptom was noticeable in five cases. In Case 2, for example, the participants indicated they had expected a different agenda. In Case 5, two participants argued the session set-up would not allow the group to address the real issues. This symptom appears to occur especially when participants discover during the meeting that they do not subscribe to the meeting goals, that their opinion is irrelevant, or that they do not like the group composition. In these situations, participants want to redesign the agenda to better fit their needs.

The worst symptom of rebelling participants is when some or all of them hijack the meeting, that is, make a conscious effort to disrupt the meeting process or take over the meeting. For this symptom to occur, at least some participants must know beforehand what they want out of the meeting. If they want it badly enough, they will hijack the meeting when it moves in a direction that does not suit their needs. The most explicit example of this symptom happened in Case 14. As soon as the meeting convened, one participant asked for the floor and started to argue about how the meeting should be run. He began offering an endless stream of suggestions and proposals for the meeting process. With each new proposed agenda item he would disrupt by offering suggestions for different ways to do it. When he finally sat down, only 15 minutes of the meeting remained.

Participants are unhappy with the process. The various cases also indicated that an unsuccessful GSS meeting results in participants complaining about the meeting process. This was noticeable in the majority of the cases. Participant comments here are explicit: “The process was too chaotic;” “The process consisted of endless discussions that did not get to the point;” “the process wasn’t structured enough;” “It was rather boring;” and “In principle, the process was good. But it was executed poorly.” The data shows there is a plethora of causes for process complaints. The three main causes involve a mismatch between the participants’ and meeting owner’s justification for the meeting; a dislike of anonymous communication; or doubts about the facilitator’s skills.
Participants are unhappy with the results. Looking at the studied cases, the most noticeable symptom of a GSS meeting failure is dissatisfaction with the meeting's results. The cases reveal that there are two sources of this dissatisfaction. First, the conveners may complain about the results. For example, in Case 9, the convener indicated afterward that the meeting results would be of little use to the project. A close look at the cases reveals this happens when the convener does not define the meeting goal clearly, does not understand the participants' perspective, or invites inappropriate people to join the group.

Second, regular participants may express concerns regarding the meeting results. The participants' concerns may range from negative attitudes through to an inability to form an opinion. An example of the latter comes from a participant in Case 10: “How can I evaluate the quality of the meeting results if I don’t know what purpose they serve?” However, most often participants were more direct: “I don’t think we have any (results),” “Just a heap of unsorted bits of text,” and “Results? Which results?” A closer examination unveils three distinct main causes: poorly defined goals by the meeting owner combined with conflicting expectations about meeting content; a dislike for anonymous communication; or poorly perceived facilitation support.

Recommendations

Although the cases represent a limited sample in terms of geographical distribution, many of these ill-fated meetings showed distinct patterns of causes and symptoms. What can we learn from them? First, that preplanning is critical to avoid the pitfalls illustrated in the cases. Facilitators themselves agree this is the single most critical success factor for GSS meetings [1]. Also, that preplanning should focus on clearly defining the meeting goals. It turns out that problems regarding the meeting goals are related to all the symptoms we recorded. In short, preplanning involves identifying:

1. The goal of the meeting, for the convener, the participants, and the facilitator;
2. The deliverable the group is expected to create and its intended use;
3. The participants who must create the deliverable;
4. The sequence of steps for the group to follow in creating its deliverable;
5. The prompts and questions that will be posed to the group at each step; and
6. The selection and configuration of GSS tools.

However, the stories here show that while preplanning is vital, a good preplan is still no guarantee for success. So, what else can we do? We offer facilitators the following recommendations:

• Prepare with both the convener and some of the participants. Find out what they are thinking and expecting. Guide the convener in expectation setting and management for the group.
• Leave ample time for oral discussion during convergence activities. Convergence means moving from the many ideas produced in a brainstorm to a focus on the few concepts worthy of further attention. Oral discussion is key to gaining shared understanding.
• Define a meeting script that includes contingencies. Remember that “no plan survives first contact with the enemy.” Having rigorously planned, however, one is in a much better position to know how changes to the plan are likely to affect the outcome.
• Before GSS work begins, be sure the participants understand the deliverables they are to create. Check with participants to see whether they believe the deliverables are worth their effort. If not, consider abandoning the engagement.
• If the facilitator is inexperienced, work in pairs: let an experienced facilitator mentor an inexperienced one.
• If things get out of hand, call a break and discuss the issue with the convener and/or the most pronounced rebels among the participants.

References


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