a collab-
oration
guidebook

intro-duction

Introduction

This guidebook was co-authored by students enrolled in Designing to Collaborate, a new elective in the School of Design in the fall of 2020. From the first day of this new elective, students helped shape the curriculum for the course by identifying their interests as they relate to collaboration and what Design might do for it.

Our work started with honoring our respective backgrounds, identifying why we were present in the classroom, and sharing our personal values and goals for the semester. We did this through a number of exercises, including Where Do You Know From (thank you Hillary Carey for this suggestion!), an "an exercise in placing ourselves together in the classroom"; a collaborative framework I am developing as part of my own research which highlights individual values and goals, and asks team members how they might support the values and goals of their teammates; and Team Canvas, a tool designed to "bring members on the same page, resolve conflicts and build productive culture, fast".

Through the semester, we read and discussed a number of sources, workshopped collaborative methods and tools, and took on the continuous work to make the course itself highly collaborative. I identified many—but not all—of the sources we used in class, and we were joined for guest lectures by CMU doctoral researchers Hillary Carey (Transition Design PhD candidate whose research is focused on racism) and Joshua Gyory (PhD Candidate in Mechanical Engineering whose research includes efficacy of individuals and teams).

After considering a number of ideas, we arrived at the final project: a guidebook on collaboration. Students identified a number of topics of interest which we organized using affinity diagramming in Figma. While all of these topics didn't manifest in the final book, many did, with five major chapters: Care & Ethics, Adaptive Collaboration Tools, Team Structure, Intra-team Relations, and Evaluation Criteria.

Students co-wrote and co-designed this guidebook to help make your collaborations more ethical, adaptable, accessible, and effective. While we do not think that by any stretch this book is exhaustive, it is a view into a number of tools, methods, and considerations for you and your collaborators.

One last comment: I have to thank this group of students for their earnest engagement, wonderful attitudes, and hard work. They have been really wonderful to work with, true collaborators for the first offering of this new course. I was not sure what it would mean to run a course with a mutually-defined calendar of topics and sources, but the maturity and earnestness of this cohort has made the class and this project successful. They have been respectful of one another from day one, willing to workshop ideas, have been willing to try things that we were uncertain about, and have set a nice agenda for our learning process.

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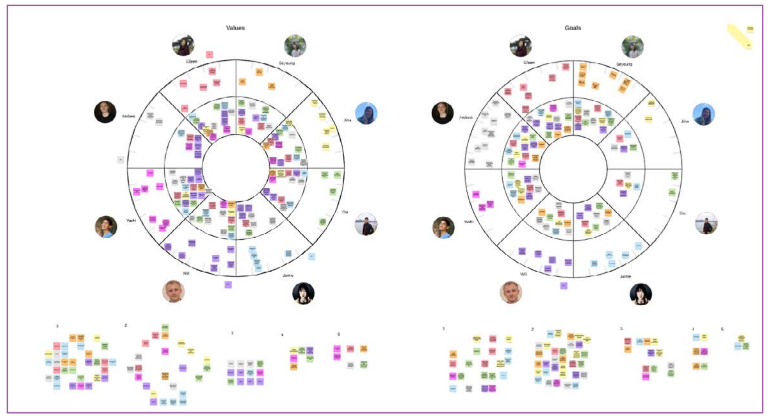
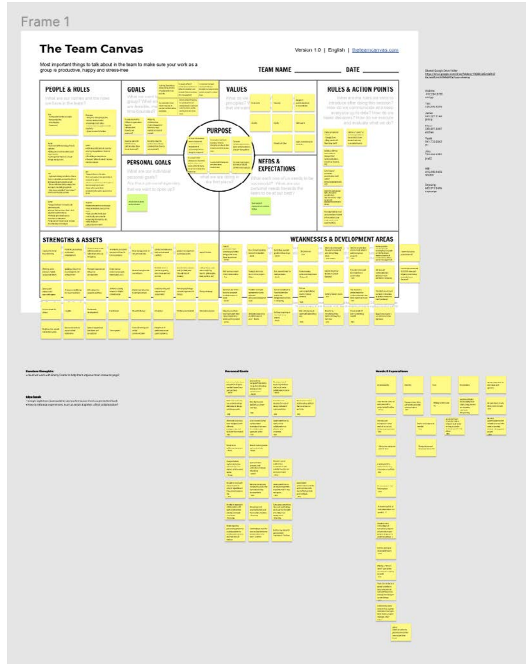


Values and Goals alignment canvas



Team Canvas

Figma canvas with an affinity diagram of topics; colors represent different students.

care
& ethics

High stakes collaboration

How high stakes can affect successful collaboration

Topic
Care & Ethics

Author
Will Rutter

Collaboration is difficult in any context; however, raising the stakes adds a whole new set of issues and concerns to any collaborative effort. From industrial pressure to ship a product to the potential for large-scale harm in international relations, high stakes can create situations where it seems time is of the essence and failure is not an option. In these scenarios, successful collaboration is not only most important, but also can be harder than usual as stress builds within a team. A recent paper by Cromwell and Gardner suggests this is especially true within teams that are unfamiliar with one another: studying an innovation contest in the legal industry, they found that in higher stakes situations teams of individuals who were unfamiliar with each other performed much worse than in lower stakes settings. Interestingly, they also found that higher stakes actually increased performance in teams of individuals that were highly familiar with one another. It's not yet clear why these patterns of successful or unsuccessful collaboration emerge depending on familiarity; however, one thing is certainly clear: higher stakes affect the way we collaborate.[1]

What to do in high stakes collaborative scenarios:

If higher stakes affect collaboration success, how can we ensure effective collaboration in high-stakes scenarios?

Collaborate with those you know well
The aforementioned study by Cromwell and Gardner suggests that teams of individuals with a high degree of familiarity with each other perform better when the stakes get high. So, if you know you are heading into a high-stakes collaborative scenario, try to form a team with those you know well, trust, and with whom you have worked successfully before.[2]

Situations may arise where you must collaborate with those you don't know well in high-stakes situations. In such cases, the best course of action is to build trust and familiarity quickly. Effective methods to achieve this are described in this book's later sections on Creating Safe Spaces and Psychological Safety.

Craft a team where people are effective both individually and collaboratively
Teams collaborating in high stakes situations often may find themselves in situations where the members must work both individually and together in quick succession, seamlessly. In high stakes scenarios, crises can be averted by ensuring that your team comprises individuals who are not only effective in a collaborative setting, but also as individual operators.[3]

Let go of underperforming members
In high-stakes scenarios, team members all must be pulling their weight and there may be little time or resources for supporting underperforming members. Better to let these members go from the team and, if your organizational structure permits, bring them back on when the high stakes situation has passed and ensure those individuals are provided with the appropriate opportunities for growth.[4]

Clarify roles and responsibilities early
Confusion with regards to roles and responsibilities can wreak havoc on a high stakes collaborative scenario. Clarifying each individual's position and duties ensures that the team works at peak efficiency when time and resources are scarce.[5]

Lead confidently
Confident, competent leadership keeps teams focused and aligned in high stakes collaborative scenarios. Leaders should ensure that team members keep the mission and goals of the collaboration front and center. This does not, however, mean that leaders should micromanage their team: micromanagement can inhibit the efficacy of team members as they work.[6]

> “**Confusion** with regards to roles and responsibilities **can wreak havoc.**

Collaboration without exploitation

Topic
Care & Ethics

Author
Will Rutter

Collaboration, by definition, involves different individuals, generally from different backgrounds, working within some sort of power dynamic. While collaboration can and ideally does empower those lower in the power dynamic, collaboration can also be used to exploit, intentionally or not, members of the team. Part one of this section outlines several different types of exploitation, intentional or unintentional, that can occur during collaborative efforts. Part Two suggests collaboration methods and approaches to avoid these exploitative outcomes.

Exploitation arising from collaboration

Task Assignment Bias
Task assignment bias arises from the presence of stereotypes in a team. These stereotypes can lead to bias in the assignment of tasks to team members based on aspects of their identity that do not necessarily correspond to their strengths or contribute to their growth.[7]

Ethics Dumping
In their book Equitable Research Partnerships Schroeder et al. define ethics dumping as "occur[ing] in collaborative international research when people, communities, animals and/or environments are exploited by researchers."[8] Ethics dumping can take many forms, but generally occurs due to power differentials between researchers from wealthy backgrounds and research participants from impoverished ones.[9]

Tick-the-Box Approval
Team organizers may seek out a team member or advisor belonging to a specific group of people, generally defined by some aspect of their identity and not represented amongst the organizers, to achieve "tick-the-box" or "token" approval for projects involving that particular group. While perhaps well-intentioned, this action is arguably exploitative of the individual and the group of people in question as rarely can one individual speak for an entire group.[10]

Overworking high-performers
Team leaders may feel pressure to give the most work to their highest performing team members in order to ensure the production of top-quality outputs. This practice potentially overworks and therefore exploits these high-efficiency or high-performing individuals. Additionally, this practice may also hamper the growth of lower-performing members of the team.[11]

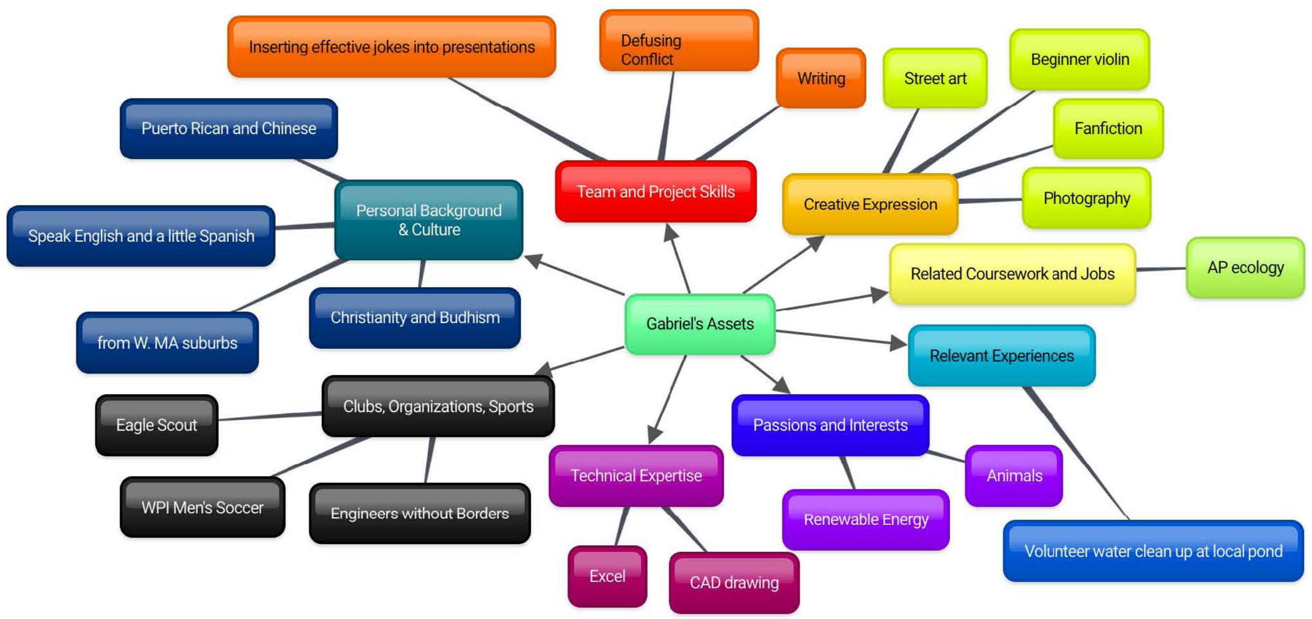
> "Ethics dumping generally occurs due to **power differentials** between researchers research participants.

Strategies to avoid exploitation in collaborative contexts

The diversity of approaches to mitigating exploitation in collaborative contexts can be mixed and matched depending on the situation. The following reference table maps types of exploitation in collaboration with potential avoidance strategies:

	Asset Mapping	Fairness, Respect, Care, & Honesty	Work With Communities	Divide Work Equitably
Task Assignment Bias	X	X		X
Ethics Dumping		X	X	
Tick-the-Box Approval		X	X	
Overworking high-performers	X	X		X

Asset Mapping
Asset mapping is an approach to countering exploitation due to task assignment bias. Each team member creates an asset map for themself by creating a chart-based representation of their personal and professional assets, as they see them. These assets can be defined in whatever way the team member chooses, and could include such details as information about the team member's background, professional accomplishments, and personal strengths. Each team member then shares their asset map with the rest of the team, after which the team may choose to create an additional "Team Asset Chart," drawing connections between the expressed assets of each team member in the context of the goals of the team. Asset mapping is believed to significantly reduce task assignment bias, as well as build team relationships, undermine stereotypes, uncover inequities, and build team members' confidence in themselves.[12]It



Example of an Asset Map from Stoddard and Pfeifer's "Diversity, Equity, and Inclusion Tools for Teamwork: Asset Mapping and Team Processing Handbook."[23]

is worth noting that asset mapping cannot overcome unconsciously ingrained stereotypes that individuals have within themselves. Asset mapping requires individuals recognize and broadcast their own assets, an activity which is itself steeped in social constructs and norms. Asset mapping is effective, but is not a "silver bullet."[13]

Instructions on introducing asset maps into your collaborations, as well as a robust discussion on their efficacy, can be found in Stoddard and Pfeifer's paper Diversity, Equity, and Inclusion Tools for Teamwork: Asset Mapping and Team Processing Handbook,[14] which can be found at here: https://digitalcommons.wpi.edu/gps-research/14/.

Carefully consider fairness, respect, care and honesty in team settings.
While always indispensable in team building, careful consideration to fairness, respect, care, and honesty are especially important when attempting to avoid exploitative collaboration and ethics dumping. Schroeder et al. identify these four aspects as key values missing from most ethics dumping scenarios.[15]

- **Fairness** is often defined in one of two ways: fairness in exchange or corrective fairness. Fairness in exchange involves equity in and exchange agreement between two parties. Corrective fairness involves court or legal systems correcting for ongdoing by a party. Both of these types of fairness must be considered in non-exploitative collaboration.[16]
- **Respect** involves accepting and appreciating diverse customs, cultures, or beliefs that may be present in a team.[17]
- **Care** requires a team-member's genuine concern for the wellbeing of others on the team.[18]
- **Honesty** in a collaborative scenario not only requires team members not lie to one-another, but also demands team members tell each other the whole truth, sans omissions.[19]

Attention to these values is of even greater importance in situations at high risk of ethics dumping, such as when a team member is far less wealthy or powerful than other team members.[20]

> "While always indispensable in team building, careful consideration to **fairness, respect, care, and honesty are especially important** when attempting to avoid exploitative collaboration

Work with communities
Rather than working with individuals belonging to a community to attempt to rubber stamp work with that community, work with the entire community (or at least community leaders), instead. This practice will not only reduce the likelihood and severity of ethics dumping in the collaboration, but also likely increase the effectiveness of the collaboration due to increased perspectives.[21]

Divide work equitably amongst workers

When leading teams, keep in mind that exploiting high-performers by giving them the lion's share of the work is likely to breed resentment in the long run. It is much more effective and sustainable to divide work equitably and then focus on improving the work and efficiency of lower-performing team members.[22]

Creating safe spaces

The term "safe space" has grown increasingly prevalent in team settings over the past few years. Fostering safe spaces at work is often associated with keeping workers feeling happy, comfortable, and psychologically safe. Safe spaces make for better teams, and in this section, we'll discuss a few reasons why.

Topic
Care & Ethics

Author
Timothy Liu

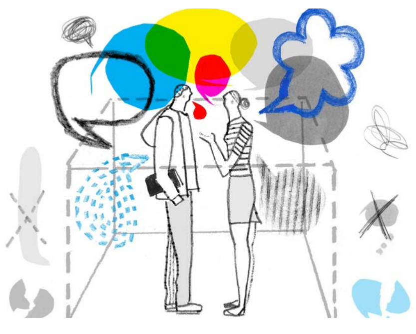
How safe spaces relate to psychological safety

Just because team members are from similar backgrounds doesn't guarantee that they'll feel comfortable being open and safe around one another. In fact, the "who" part of the team rarely seems to matter; it's a team's norms that tend to dictate how members interact with each other.[25] Researchers have found that two key norms are typically present across groups with high collective IQs: 1) members speak in roughly equal proportions, and 2) members are highly capable of evaluating how their peers are feeling.[26] A focus on psychological safety can fuel these norms because it encourages interpersonal trust and respect, as well as conversational turn-taking and empathy.[27] That's why it's crucial to encourage sincerity, honesty, and openness in establishing safe spaces in team settings.[28]

In a later chapter (Ch 5), we'll dive deeper into what exactly psychological safety is and how it can improve other factors like team productivity.

How to foster safe spaces in team settings

In addition to promoting general openness and honesty, managers can partake in a variety of practices to build safe spaces for team members. It's important to ask permission; for instance, as a team leader, ask if it's okay for you to keep the conversation on track by pushing back on straying topics. As a team member, ask if it's okay to spend more time on a certain topic or to move on if someone is uncomfortable with the direction of the conversation.[29] Encouraging team members to ask for permission before speaking out—"May I offer a response?"—fosters an aura of respect and kindness, even in situations where conversations could otherwise get testy, ensuring others understand your intentions.



Safe spaces provide people opportunities to share ideas and feelings without fear of retribution.[24]

To promote further psychological safety, other best practices include:

- devoting full attention to the active speaker
- inviting people into the conversation who haven't spoken as much
- allowing others to complete their thoughts before rebutting
- answering questions truthfully and thoughtfully
- keeping the contents of meetings private unless granted permission otherwise.[30]

Building environments where people feel comfortable speaking up and speaking out is conducive to team success at any level.

DEI

Topic
DEI
Author
Yoshi Torralva

Intro to diversity and inclusion.

Diversity plays an extensive role in the functioning of an effective team. Diversity ranges across multiple realms like cultural, work, and political backgrounds. This allows people to share multiple perspectives when developing interventions that are effective and inclusive to more people. Without a diverse team, there is a high opportunity of risk where interventions are either one-sided o r do not necessarily meet the needs of the people.

Maintaining diversity of thought, background in different stages of team progress

Even if you form a diverse team, there's still an integral part that is necessary to a team's success. That is inclusion. Without inclusion in the team, people who come from minority backgrounds may feel excluded from making decisions as they feel as if their voices won't have an impact. As a result, it should be the priority of certain members of the team to make sure that collaborative spaces are continuously kept inclusive[31]. Here are possible ways to fulfill a teams mission on both diversity and inclusion:

Regularly scheduled one on ones:
Check in on all members and ask how they feel the team is including them in the conversation.

Make decisions based on feedback from everyone:
When making team-wide decisions, seek affirmatives

Be open to change:
Diversity and inclusion on a team or large organization is not something that can happen overnight. It's important to remain steadfast in the long term goal of developing personal and external relationships with more diverse takes on approaches to accomplishing team goals.

Diversity in team formation:

In settings that allow for teams to form through choice, it's important to consider how diverse backgrounds can support a stronger culture on the team. If teams are composed of individuals that share too many similarities, this could lead to outcomes that potentially are not as inclusive. Through the formation of diverse teams, the beauty of perspective takes shape.

Especially when establishing a team, it's important to be cognizant of factors that play into building a diverse team. Factors include, but are not limited to, gender, age, and cultural background. By being aware of these factors allow people forming teams to consider if by bringing someone on, how they contribute to the working environment from not only their skills but background that can benefit the team as a whole. Research done by McKinsey and Company[32] even states that diversity on teams can increase financial progress. One thing to note however, is that it's important not to only consider diversity as a financial gain. Rather, it's one that builds a multi-perspective network of individuals that reflect the true diversity of respected areas.

Assigned teams

So far, literature suggests how to bring diversity through a recruitment perspective. However, in many school settings, the option to choose teams may not be the option. With that said, there still is an opportunity to allow everyone's backgrounds to flourish through more formal and informal methods. One great example is the "Where do you know from"[33] activity by Eugenia Zuroski that allows team members to go into less surface level responses when learning about team members.

Accessibility
Creating an inclusive environment by keeping everyone's needs in mind

Eileen Chen

adaptive collaboration

"AI is not an all-powerful tool; it will be vital to find out what the accuracy of the AI captioning is.

Accessibility

Intro to accessibility

Often when designing collaborative tools, people strongly emphasize the user experience and usability. However, there is another facet of user experience that is sometimes overlooked: accessibility. Accessibility is defined as "whether all users are able to access an equivalent user experience, however they encounter a product or service (e.g., using assistive devices)"[34]. Where user experience is involved in collaborative settings, accounting for the fullest range of users is vital. Accessibility tries to consider each type of user's unique wants and needs.

Accounting for different abilities

First and foremost, it is important to gain a thorough understanding of the different types of disabilities there are and the different needs for each. Taking the time to understand the individual needs of your team members and carefully consider the different technologies available for collaboration will go a long way in making everyone feel included and cared for.

Topic
Adaptive Collaboration

Author
Eileen Chen

Screen reader for people with low vision[35]

Some common disabilities include[36]:

- Visual (e.g., color blindness, low vision)
- Motor/mobility (e.g., wheelchair-user concerns, arthritis)
- Auditory (hearing difficulties)
- Seizures (especially photosensitive epilepsy)
- Learning/cognitive (e.g., dyslexia, visual comprehension)

Other users may experience impairments on occasion[37]:

- Incidental (e.g., sleep-deprivation)
- Environmental (e.g., using a mobile device underground)

There are many resources available that discuss each type of disability in depth such as WebAIM, NEADS, and the CDC.

Picking the right tools

With so much technology out there, especially in this new virtual norm, we should carefully weigh our options when deciding the tools and applications for your team. They should be catered to your specific team's needs as well as designed for general accessibility.

For example, when deciding what video conferencing technology to use, we should consider captioning, sign language, and audio description capabilities. With captioning, keep in mind that AI is not an all-powerful tool; it will be vital to find out what the accuracy of the AI captioning is. Furthermore, we should consider how the platform was tested for accessibility, since there are not as many standard tests for desktop applications as web technologies because they range in functionality. We should confirm, for example, that the platform has been tested with screen readers and keyboard-only users. Most applications post their accessibility features (e.g. WebEx, Zoom), which may be a useful resource to use when deciding which video conferencing technology to use. [38]

Beyond technology & conclusion

Accessibility in our digital age is not only manifested through the technology that we choose to use as a team. The process implemented for accessibility and greater inclusivity in teams is equally if not more important than using the "right" technology: accessibility is critical to identifying those "right" technologies. Everyone should be required to attend some workshop that teaches people how to ensure meetings, virtual or in person, are accessible for everyone. For example, some tips are ensuring that presentation slides adhere to accessibility guidelines and that presenters provide materials in advance so that people with assistive technology can review materials beforehand.

Accessibility should not be an afterthought when issues arise, but integrated in the decision making and collaborative process. Garnering opinions from your team members will ensure that their voices are heard and needs are addressed.

"Accessibility should not be an afterthought when issues arise, but integrated in the decision making and collaborative process.

remote collabor-ation

Remote Collaboration

Topic
Remote Collaboration

Author
Seyoung Choo

The rapid rise of the digital era has reshaped the landscape of the workplace, introducing a new paradigm or collaborating - remote collaboration. Studies conducted in 2018 (pre-COVID) by Gallup and the Bureau of Labor showed that 22% of Americans work from home, and at least 50% are involved with remote or virtual team work - these patterns are estimated for continued growth in numbers.[39] Remote collaboration defined by the editorial team of BIT.AI is, "a process where team members work together, regardless of their geographical location, to achieve organizational goals."[40] Although remote collaboration opens up new opportunities, unlike traditional office-based working environments which develop naturally, remote collaboration tends to require a more explicit conversation and agreement on how to work together.[41] The missing component of body language can be a critical damage in collaborating, as it introduces confusion, anxiety, lack of engagement, productivity, and innovation - ultimately distorting the normal pace of collaboration.[42] Therefore, in order for remote teams to be successful, it is crucial to understand the types of remote collaboration, necessary rulesets, available tools, modes of communication, and most importantly how to use them.

Breaking Down Remote Collaboration

Distances in Remote Collaboration
In order to achieve optimum remote performance and the best remote working experience, remote teams must first understand the different types of remote collaboration as well as the different types of remote workflow. The Hard Business Review in the article "How to Collaborate Effectively If Your Team Is Remote", introduces the three kinds of "distances in remote collaboration. The three types includes:

- Physical
- Operations
- Affinity

Physical distance stands for the dispersed physical location of team members including the differences in time zones. With the current technology and tools members could be collaborating across the globe. Operational distances represent the range in skillsets, bandwidth, accessibility, team and size. Adapting and adjusting to various circumstances and variability is addressed differently from traditional collaboration models. Lastly, and most importantly affinity distances is the distance between individual value, trust, and interdependency levels. Harvard Business Review argues that reducing affinity distances is the most effective way to enhance remote team performance, emphasizing the importance of communication, empathy, and interaction.[43]

Asynchronous/Synchronous collaboration
In addition to the various "distances" proposed by remote collaboration Another important component of remote collaboration to keep in mind is the difference between synchronous and asynchronous collaboration.

Synchronous collaboration is a real-time or live communication and workflow that takes place in a fixed digital space and time while an asynchronous collaboration is when communication is not exchanged real-time and the interval between messages are longer. Synchronous channels of communication in a remote setting can include face-to-face conversations on video, phone, or live chat, or exchanging ideas live on collaborative whiteboards. On the other hand, asynchronous channels of communication mostly consist of email messages, voice or video recordings, or use of collaboration platforms that are not live and instant.[44]

Both synchronous and asynchronous collaboration has its advantages and disadvantages. It is important that remote teams consider the qualities of both workflows and agree on which model works best for the work and team or how can the two types be combined to fit the needs of the team.

Synchronous		Asynchronous	
PROS	CONS	PRO	CONS
Engages everyone in the team instantly.	Does not work well for teams of distributed locations and time zones. (wide physical "distances")	Allows the team members to work at each person's own convenience and own schedule.	All team members require discipline in necessary digital tools and must consent over modes of communication and workflow
The verbal nuances and body language aids in the clear exchange of language, helpful for handling personal or sensitive topics.	Tend to be costly and may require significant bandwidth to be efficient.(large operation "distances"	Helpful in recording, sharing, and distributing the interactions of a group.	Vulnerable to miscommunication and hardships in easily correcting or retracting from the mistake.
It is useful in addressing critical or emergency situations that require immediate attention and response.	More difficult to coordinate as agendas, conversations, and schedules are tackled simultaneously.	Allows increased control over space and time, where you can pick and choose task and communication priorities.	Lack of face-to-face or voice interactions weakens the emotional connection between team members. (increased affinity "distances"
Great for conducting complex discussions involving dynamic feedback or a series of open ended questions.	Lacks in allowing team members to deeply concentrate on the task.	Team members have more time to think and prepare their response, since they are not pressured for instant replies.	Introducing new collaborative platforms and tools can be costly.

45,46

This chart lists possible advantages and disadvantages of both synchronous and asynchronous collaboration. Remote teams can use this chart to analyze each method of collaboration, its capacities and capabilities to find the type of collaboration method best suited for the team's conditions and needs.

Rules

Whether the team elects a synchronous, asynchronous or a combination of the two, in order to be successful in achieving a high-level of performance in a remote setting, the team must establish and agree upon how they are going to incorporate these methods of remote collaboration and communication into their workflow. Specifically, establishing a ruleset of engagement, tools, and communication is essential to this process.

Engagement

Establishing a rule of engagement is an essential part of setting up the office environment in a remote condition. Engagement can be categorized into five main groups including, objective and participants, format and technology, translating methodology, delivering virtual sessions, and following-up.[47]

- Objective and participants includes the discussion on who are the people who are included in the conversation, their individual situation connectivity and location. This section also includes the question of what will be the general objective and individual deliverable.[48]
- Format and Technology mainly includes deciding upon which tools are used to communicate, document and align an individual's work.
- Translating Methodology is the agreement over questions such as, how and when you will check in with each other each week, the best hours to contact each other with non-urgent requests, what to do if you're blocked or have an urgent request, how you will flag your availability or unavailability to others, and other process of the general workflow.[49]
- Delivering Virtual Sessions, especially in a synchronous session, members must think about how to start and end a meeting, how to share and discuss work, how to include introductions and activities, as well as other various situations about facilitation.[50]
- Lastly, agreement on Following-Up includes deciding where you can see and update progress against team goals, when and where you can provide feedback, and how to document and broadcast summaries or results.[51]

Communication
Relearning how to communicate in a virtual setting is a necessary process for all parties in remote collaboration. Unlike face-to-face communications, presentations, and meetings in a traditional setting, the lack of body language, and vocal nuances can easily lead to miscommunication or increase in missing information. Here are some important rules and practices to establish for remote communication:[52]

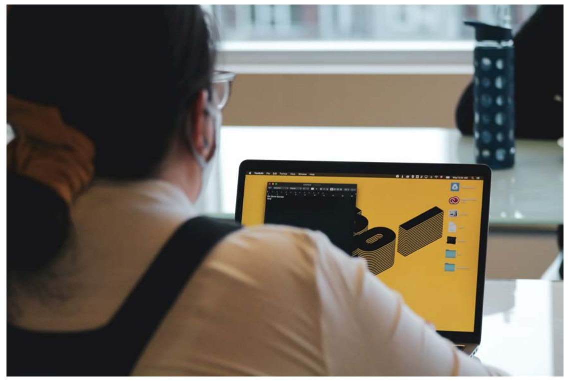
- Don't conflate brief communications and clear communications: Be clear and self-contained — linking any resources and assets, and detailing relevant information, actions and requirements.[53]
- Don't bombard your team with messages
- Establish communication norms to bring predictability and certainty to virtual conversations.
- See the hidden opportunities in written communications, that aids the recipient pick-up the tone of the text.
- Utilize asynchronous communication relevantly instead of discussing every message in real-time.[54]
- Structure communication in various team levels to minimize repeated or unnecessary information.[55]

"It takes clear communication, a supportive work culture, and virtual team-building efforts to create a strong team.

Tools
Remote collaboration requires the use of various digital tools and platforms to facilitate communication and collaboration. Understanding the differentiation of tasks and the strengths and weaknesses of each tool is necessary to collectively decide on which platforms will be used to facilitate work.

- Some of the main tasks can be divided into:[56]
- Virtual facilitation including brainstorming, planning, decision making, alignment, and voting
- Virtual communication both synchronous and asynchronous
- Virtual presentation and meetings
- Virtual project management or task management
- Virtual team building and events
- Virtual documentation or cloud-based tools

A detailed guide for types of remote collaboration task categories and paired digital tools and each of its capacities are listed in page 7-8 of Deloittes presentation: Remote Collaboration Facing the Challenges of Covid-19[57]



Remote collaboration requires the use of various digital tools and platforms to facilitate communication and collaboration.
https://unsplash.com/s/photos/virtual-team-work

Covid-19 has brought many workers to set up a "home office".
https://unsplash.com/s/photos/covid-19

Remote Collaboration During COVID-19

Unique circumstances due to COVID-19 have forced teams and work places to quickly rethink and rebuild a new system in order to adapt to various complications linked to the characteristic of working remotely. According to a survey conducted by Slack a proprietary business communication platform,[58] an estimated 16 million U.S. knowledge workers ("anyone who holds an office position and/or works with data, analyzes information or thinks creatively in a typical workweek) switched to remote working since the World Health Organization (WHO) officially declared COVID-19 as a pandemic in March.[59] Some of the issues newly remote knowledge workers are facing includes addressing stress and panic driven by the uncertainties of the pandemic, work at home difficulties, and learning new tools and workflow. Additionally, the transition to a large scaled remote collaboration due to COVID-19 has raised the question of leadership and the new roles of leaders during these unprecedented times, as well as concerns for preparing for the post-pandemic workscape.

Keep Calm and Carry On

The nature of the COVID-19 situation and remote-working due to the virus has unlocked a multitude of personal and stressful circumstances including adapting to a new environment, battling a new set of distractions, panic, and stress.[60] In addition to pandemic stress and panic, experiencing an unprecedented fusion of work and private life such as juggling at-home responsibilities, and setting up a "home office"can be especially difficult for newly remote workers impacting their productivity, sense of belonging, and the overall work satisfaction.[61] In order to tackle these issues produced by the effect of COVID-19, it is most important to recognize the diverse range of complications and stress from the pandemic and finding ways to prevent further decline in one's ability to work. Team members should be able to empathize with other members' situations and focus on paying attention to others' specific situations and needs, and also have a sense of others' routine, schedule, patterns, or habits to quickly adjust and adapt to shifting situations. Some other ways to engage the community and address group stress is to have one-on-one conversations over phone or video to minimize social disconnect and communicate empathy, as well as creating virtual event and celebration spaces for team members to socialize and strengthen relationships .[62,63]

Work at home
In addition to practicing in empathizing with team members to address issues of stress and panic from working remotely due to COVID-19, setting up an organized and undisturbed workspace and workflow at home is very important in preventing decline in productivity, in the sense of belonging, and in the overall work satisfaction.

Here are some tips Deloitte suggests in setting up an effective workspace and workflow at home:[64]

- Develop a daily routine with scheduled breaks.
- Have all digital tools and technology ready to use.
- Dress comfortably and appropriately, reflective of your company culture as well as your personal preferences.
- Do not forget about socializing with your colleagues, consider virtual lunch or coffee dates if these are part of your routine
- Define a dedicated, tidy and organized workspace isolated from other activities in the house.
- Do not forget to disengage at the end of the work day and try to maintain an appropriate work-life balance

Setting up an effective workspace is crucial to increasing the productivity of remote work. https://unsplash.com/s/photos/work-at-home

Leadership during the pandemic: New role of leaders
As the pandemic and its unprecedented characteristics drastically changes the environment for collaborative work, there is also a shift in the role of a leader and an increased demand for strong leadership and guidance.

Here are some guidelines for remote team leaders:[65]

- Communicate company strategy and values.
- Help members manage their work life balance, focus on addressing their well-being as a priority. Although there is a heightened sense of pressure to deliver, it is the role of the leader to make members feel like they can "switch off and leave work for the day."[66]
- Give workers freedom to make decisions and take initiative, establishing trust, while clearing communicating team goals and personal contributions.
- Be available and approachable for communication
- Share outlooks for the future and prepare for the new normal.

Preparing for post-COVID

As the COVID-19 situation continues longer than expected, it is most likely that officescape post-pandemic will be permanently changed. Experts predict that most companies will likely continue working remotely. The Global Workplace Analytics (GWA) estimated that there will be an upswing in the adoption of remote work by the workers who were introduced to remote work through the pandemic. The GWA predicts that the main cause of this effect will be due to reduced concern about productivity and integrity of remote working on an administrative level, increased awareness of the efficiency and sustainability in working at home, as well as increased concern and preparedness for future pandemics.[67] Whether the future consists of increased remote collaboration, or returns to pre-pandemic workscape, this pandemic has been an educational experience for us all, and the new information acquired from this experience including technological advancements and agencies of remote collaboration will permanently remain.

> “COVID-19, after 9/11, is the second notable layer in remote working. It’s going to have a very large impact – and may be the new normal for a very long time.
>
> - Cheryl Dewar

team structure

Team Roles

Types of Leaders

Topic
Team structure

Author
Jamie Park

Although there may only be one designated leader in the group, there may be multiple types of leadership positions for the task.

The first type is a **designated leader**, who takes the responsibility and guides the team through the project. This leader ensures that the weekly goals are met accordingly and the members are emotionally and physically well. A best leader for the project is not always the most experienced.[68] Leadership is something that is learnt to experience. It might be a wise decision to constantly shift the leader role among the team, so novice leaders will learn how to become expert leaders.[69]

Another type of leaders is an **active follower**. This type of leader participates in the decision-making process and in meetings to achieve the common goal of the team. An active follower takes initiatives and helps the vision of the team come true.[70]

The third type of leader is a **peer leader,** who provides commitment to the work and shows full responsibility even when they personally disagrees with the decision made by the team.[71]

The last type of leader is a **self leader**, who practices leadership on self as a personal role on top of a team role. A self leader would take care of one's well-being for the productivity of the team.[72]

Some people may be more comfortable in one leadership role than in others. But given that leadership is a skill that is gained, not something one is magically born with, it is highly advised to practice taking initiatives
to learn how to become a wise leader.[73]

Tools needed to be a "successful" team player

Being a team player is never easy. But what if there are a list of rules you can follow to be a better member for your team? Refer down below to see what kind of behaviors may foster collaborative and supportive environment

- **Increased transparency** helps the team members understand the motivations, inspirations, and the goals of each project. Be open to changes and potential feedback: If you want to initiate a change, explain why certain changes needed to be made and share thoughts, ideas, and concerns around the event. If someone else is providing feedback, be open to new ideas and do not take the comments personally. Communicating with the team will help them understand where you are coming from.[74]
- **Practice introspection** by examining the reasoning and feelings behind your decisions, actions, and behaviors. Having a concrete explanation on why you made certain decisions will strengthen your work when presenting it to others.[75]
- **Believe in yourself!** Confidence is the key for believing in oneself. Trust that you have made the right decision when tackling new challenges. People will follow those who believe in themselves and their work.
- **Be aware of what you are doing and ask for help** when you need it. Have a thorough understanding of your role and expectations by being aware of the timeline. Respect the boundaries of your position and others by asking for assistance or not taking over other's roles.[76]
- **Commit to the team** by working hard. Be fully invested in the team by understanding and working to achieve the common goals. Try to have a positive attitude towards work, which is proven to increase productivity. [77]

Like anything else, these are not set answers to creating a successful team nor being a great team member. Remember to be flexible depending on the group dynamics and the situation

Team Formation

Different stages of team development according to Bruce Tuckman

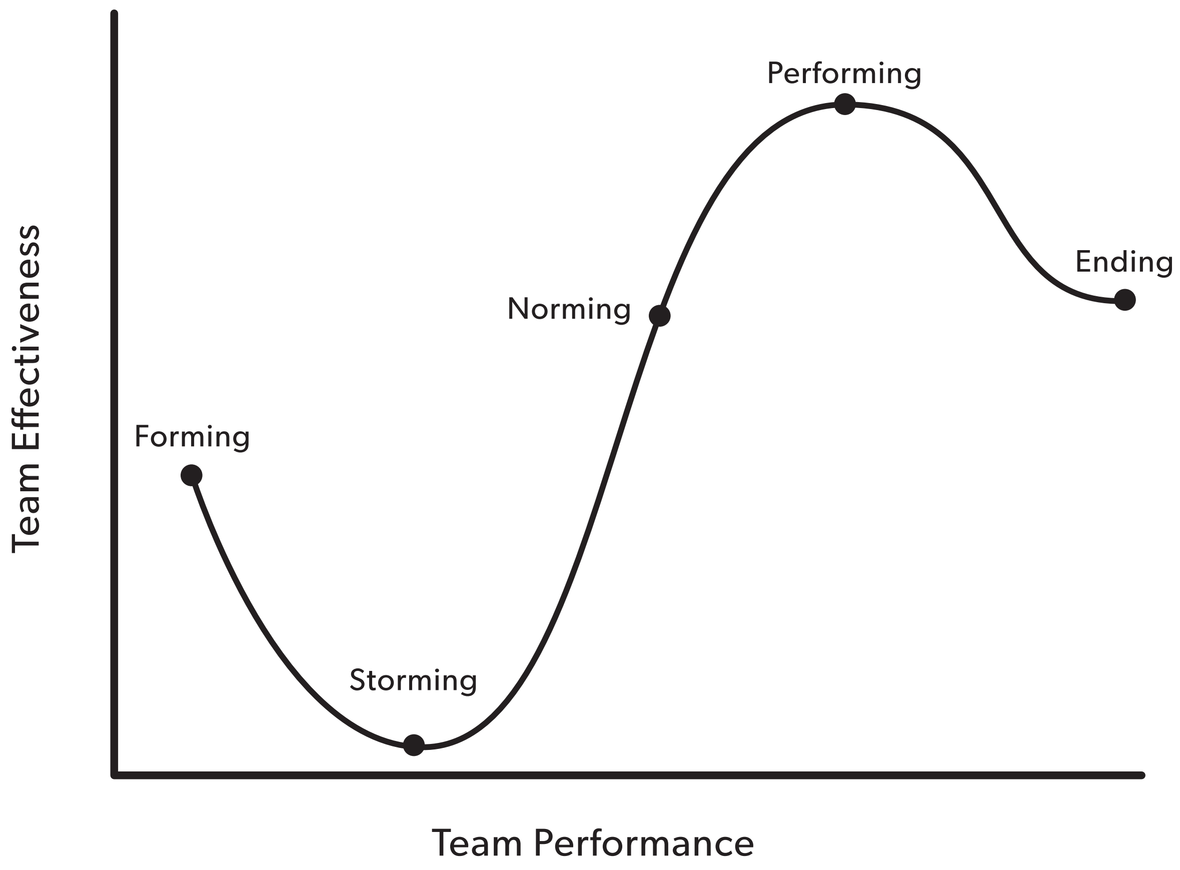
Topic
Team structure

Author
Jamie Park

Bruce Tuckman developed four stages of Team Formation, which was later expanded to five stages. The diagram provides a general overview of how a team may act and feel in each phase. Although this information may not be an exact footprint of all teams existing in the world, it is a good resource to assess and analyze the level the group is in.[78]

- **Forming**: The team members are typically excited to be a part of the team. The members are eager to work ahead and have high expectations for the overall team experience. [79]
  The team should create a clear structure and list out the goals. This is also the moment to assign roles. It is also important to align the team's mission and expectations to build trust. At this phase, task accomplishment may be relatively low.
- **Storming**: The members are disappointed because they realize that the work will not live up to their expectations. There will be concerns around being unable to meet the goals and some members may be disheartened by the team effort. [80]
  The team should refocus the goal and break larger goals into smaller, achievable steps. By doing so, the team may feel more accomplished.
- **Norming**: Discrepancy is likely resolved at this stage of team formation. The members are more comfortable expressing their ideas and feelings to the rest of the team; diverse thoughts are also welcomed. Constructive criticism is crucial at this stage, as it can reshape the project. [81]
  The team will see an increased productivity. This might be the appropriate moment for evaluation of the team process, team dynamics, and overall performance.

TUCKMAN'S TEAM & GROUP DEVELOPMENTAL MODEL



- **Performing**: The team members are satisfied and have a sense of accomplishment with the process of the project. The roles on the team become fluid, where one may take the initiatives on one week and the other on another week. Differences among members are appreciated and are used to enhance the performance.[82]
  The team will be committed to achieving the common goals. The members continue to deepen their knowledge and skills. Accomplishments in the team will be measured and celebrated.
- **Ending**: Some of the team members may lose focus on the team's task, dropping the overall productivity. Other members might focus more on the task as a response to the teammate's under performance, increasing the productivity instead. The competition of the deliverables will provide a closure on the remaining teamwork. [83]
  The team should have a final evaluation on the process and the overall product. Some teams create a closing celebration to acknowledge the contributions of the individuals and the overall accomplishment.

Inclusive behavior of successful teams

Topic
Team structure

Author
Jamie Park

There are six categories of behaviors that would help forming a successful team and stable team dynamics. Although this might not be a clear-cut solution to many team issues, it is a good outline for oneself to assess their own attitude toward the team.

- **Mutual Trust**: The members in a successful team believe that the other team members are acting in the best interest of others. They have the mindset that people are working with their best intentions and to improve the team. They try to avoid judging before listening to both sides of the situation to avoid unnecessary arguments.[84]
- **Interdependence**: Members in a successful team also share workload and keep the mindset that they are working as a team. They acknowledge other members' ideas and balance participation, ensuring all the voice is heard. They also provide emotional, physical, and intellectual support.[85]
- **Team accountability**: Such team members also share the responsibility of helping others and preventing the project from falling apart. They make sure that they do their assigned part of the work and let others know in advance if they cannot do it on their own. The team members share credit and success when the project is acclaimed.[86]

"The members in a successful team respect personal interests and values.

- **Learning Mindset**: The group members also have a learning mindset to learn and constantly improve their work. They review the current process, receive feedback, and self-examine what is working for the team and what is not. They are also open towards learning from each other by sharing information and experience. Likewise, a successful team facilitates interpersonal learning by establishing a clear learning process.[87]
- **Respect**: In a successful team, the members also respect personal interests and values. They are understanding of other member's likes and dislikes, diversity, and motivation and demotivation. They do not intentionally cross the boundaries that would hurt the other person. The ultimate goal of the team would be to align the different interests of the team members with the interest of the team.[88]
- **Embracing uncertainty**: The team members also do not have a negative attitude towards ambiguity. Although the project outcome may not meet the expectations, they know when to let go. The team members acknowledge that certain outcomes may not be as nice as they have originally planned and are okay with it. (Remembering that some members are not as comfortable with ambiguity is the key. It is wise to not overload with work and remember to take a break.[89])

How different roles factor into team structure

Topic
Team structure

Author
Jamie Park

The Belbin Team Roles state that there are nine roles in a successful team structure. Each role has an equal amount of importance and neither one is superior than the other. Despite having nine roles, it does not mean that a team needs nine people to be "successful." Each team member typically takes a few roles in any given situation. In fact, Dr. Belbin recommends that the ideal number of team members is six.[90] The roles are listed below:

- **Resource Investigator**: A resource investigator finds ideas and brings it back to the team, so the team can have more in-depth conversation around them.
- **Team Worker**: A team worker helps the team identify the work that needs to be done and completes it for the team effort.
- **Plant**: A plant solves problems in an unconventional but clever way.
- **Monitor Evaluator**: A monitor evaluator provides a logical eye and makes impartial judgments when the team runs into roadblocks. This member weighs the team's options and chooses the best that would benefit all members of the team.
- **Coordinator**: A coordinator focuses on the team's objectives, drawing out the team member's diligence.
- **Specialist**: A specialist brings in an in-depth knowledge of a key area to the team.
- **Sharper**: A sharper motivates the team and prevents the team from losing the momentum of the work.
- **Implementer**: An implementer plans a workable strategy for the team to finish the work effectively and efficiently.
- **Finisher**: A finisher, also known as the quality control, uses end tasks to polish work and prevents work from errors. This person wraps up the final product.

Although appealing, this theory is questioned by some psychologists. Some research shows that a person who typically prefers task-type roles will continue to assign themselves task-type roles; people may naturally feel uncomfortable assigning both task-type and relationship-type roles due to their nature.[91]

Collaboration in market systems

The false paradox of collaboration in a competitive market system.

Topic
Care & Ethics

Author
Will Rutter

Traditional knowledge generally suggests that capitalist market systems thrive on competition. It follows, therefore, that collaboration in a market setting may be unproductive, if not entirely destructive, to a business or entity navigating a capitalist system. While no one disputes that competition is the backbone of capitalist markets, business scholars and economists have also enumerated the many opportunities posed by intelligent collaborative efforts in capitalist contexts. These collaborations can increase innovation, distribute risk, and take advantage of disparate knowledge amongst business entities in order to unlock new markets and create new products and services.

Models of collaboration in the market

Several models of market-based collaboration exist. Each model approaches collaboration from a different frame of reference, providing insight into a certain set of qualities about defined collaboration styles.

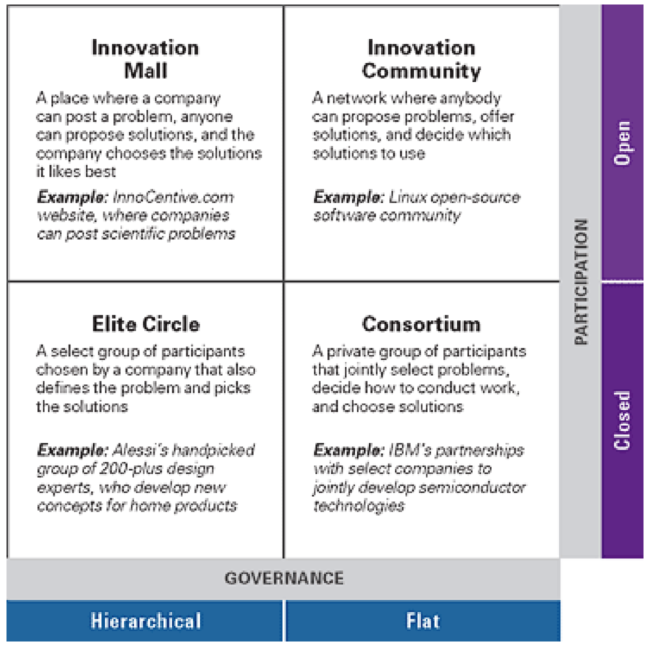
The Governance-Participation Framework
Proposed by Pisano and Verganti in the Harvard Business Review's December, 2008 issue, the governance-participation framework of business collaboration advocates a two-by-to matrix model of collaboration where governance and participation are plotted on perpendicular axes from low to high.[92] This creates four general quadrants of unique combinations of low or high participation of governance. Each business collaboration is suggested to fall within one of these "Four Ways to Collaborate."[93]

The governance-participation framework uses "governance" to refer to ways of deciding "who gets to define the problem and choose the solution."[94] Flat governance schemes take a collaborative approach to defining the problem and solution space, generally involving a subset, or even the entire group of the collaborators. Flat governance generally thrives in environments where sharing cost and risks is advantageous. Hierarchical governance refers to situations where a single entity has control over defining the problem and solution space. Hierarchical governance collaborations are generally effective when the entity or organization at the top of the hierarchy has the knowledge to effectively define the problem and assess potential solutions. Hierarchical governance also generally allows the overseeing entity to absorb more of the value from an innovation.[95]

The Governance-Participation framework uses participation to broadly describe how collaborators are sourced for the collaboration. Participation is described as either open or closed: open-participation collaborations allows any collaborator in who would like to join, where closed-participation collaborations allow only chosen collaborators into the collaborative effort.[96]

The two-by-two Governance-Participation Framework matrix, pictured to the right, defines the following four fundamental types of business collaboration.

- **The Innovation Mall** (hierarchical governance/open participation): the innovation mall style of collaboration involves a “lead” business posing a problem which any organization may then try to solve. The “lead” business then chooses the proposed solution it thinks is best. This form of collaboration best suits organizations that want to attract unorthodox or interdisciplinary solutions, yet have enough domain knowledge to reliably select the best of the proffered solution options.[97]
- **The Innovation Community** (flat governance/open participation): The innovation community is a style of collaboration where any entity can enter the community, pose a problem, suggest a solution, and select an answer to move forward with. Open source software communities are often innovation communities. The innovation community is appropriate for situations in which no one organization has the capabilities necessary to pose the right problem or evaluate the solution, and when unorthodox solutions are appealing.[98]
- **The Elite Circle** (hierarchical governance/ close participation): The elite circle is a style of collaboration where participants are selected by a “lead” organization that will define the problem and identify the solution. This mode of collaboration is most appropriate when the “lead” organization has the ability to correctly evaluate solutions and pick the best participants for the problem.[99]



The Governance-Participation Framework figure from Pisano and Verganti’s 2008 Harvard Business Review article “Which Kind of Collaboration Is Right for You?”[127]

- **The Consortium** (flat governance/closed participation): The consortium approach to collaboration involves a self-defined group of collaborating organizations that jointly define the problems and select the solutions generated by the collaborative effort. This form of collaboration is best undertaken by groups of organizations that have complementary areas of expertise but want to retain some control over a project.[100]

Value Creation, Capture, and Delivery

Ard-Pieter de Man and Dave Luvison take a value-centered approach to analyzing business collaborations in their paper, “Collaborative business models: Aligning and operationalizing alliances.”[101] They propose that business collaboration arises in three major forms--sharing, specialization, and allocation--then analyzed each form with respect to value creation, value capture, and value delivery. Value creation refers to how collaborations create greater value through their members working together. Value capture refers to how each member of the collaboration collects value from the collaboration (for instance, how revenues and expenses are split). Value delivery refers to management of the complications and challenges of bringing collaboratively created value to the market.[102]

Value plays the following roles in the three major forms of collaboration:

- **Sharing:** Collaborators in a sharing partnership create value through creating greater reach with similar expertise using economies of scale. Generally, value is captured by each collaborator through an agreement made prior to the finalization of the collaboration. Sharing collaborations usually require high integration and reciprocality in value delivery since the collaborators work closely and deliver very similar, perhaps even blended, products or services. An example of a sharing collaboration is an airline alliance.[103]

- **Specialization:** Collaborators in a specialization partnership create value by bringing organizations with different skills and expertise together to deliver services none of the collaborators could deliver alone. Generally, each collaborator carries their own revenues and expenses, and captures value according to their own business validity. Because each collaborator contributes their own specialization to the team, integration between collaborators is usually low.[104] An example of a specialization partnership is that between different types of building contractors (electrical, structural, etc.) constructing a skyscraper.
- **Allocation:** Collaborators in an allocation partnership create value by allocating risk amongst the partners with respect to which partner is best set up to handle that particular type of risk. Generally, value is captured by collaborators in allocation partnerships through performance- or success-driven incentives. Allocation partnerships usually involve sequential hand-offs in value delivery as each partner takes care of the portion of value the risks of which it is best equipped to handle. An example of an allocation partnership is the collaboration between a government transit bureau and a transportation contractor running a train network.[105]

	Sharing	Specialization	Allocation
		Value creation	
Economies of	Scale	Skill	Risk
Capabilities	Similar	Complementary	Overlapping
Relationship of the partners	Horizontal	Diagonal	Vertical
Value creation potential	Predictable	Unpredictable	Increased predictability
		Value capture	
Mechanisms	Pre-agreed split	Each partner carries own revenue/cost	Incentives tied to performance
		Value delivery	
Interdependence	Reciprocal	Pooled	Sequential
Level of integration	High	Low	Focused

The above table provides a high-level view of how different collaboration forms correspond to aspects of value creation, capture, and delivery. Table procured from de Man and Luvison's "Collaborative business models: Aligning and operationalizing alliances."[128]

Collective Impact and Ecosystems of Shared Value

Business organizations generally conceive of themselves as independent entities, especially in the capitalist market systems currently in vogue around the world. A close examination of the systems in which the organizations find themselves, however, reveals a different picture: businesses exist in a complex economic and social ecosystem, along with all other businesses. Further, by working together, many businesses have unlocked further potential for economic success, and done so in a way that also created societal benefits. In their paper The Ecosystem of Shared Value, Marc Kramer and Marc Pfizer call this "creating shared value."[106] In the same vein, the socio-economic systems which pose opportunities for the creation of shared value can be thought of as "ecosystems of shared value." To access the economic value and societal benefits available in these ecosystems, however, businesses must first be willing to work with other organizations to create "collective impact" (a term originally coined by John Kania and Mark Kramer in the Stanford Social Innovation Review). Five elements are required to create collective impact and realize the potential of ecosystems of shared value:[107]

- **A Common Agenda:** Collaborators attempting collective impact must have a shared vision for the impact they intend to achieve or "ideal future" they wish to bring about.[108]
- **A Shared Measurement System:** Collaborators attempting collective impact need to have an agreed-upon system for how success will be measured.[109]
- **Mutually Reinforcing Activities:** Collaborators should not only undertake activities that they can do well, but also ensure that their activities reinforce and support one another.[110]

> "Every attempt at collective impact needs a **dedicated, independent team**

- **Constant Communication:** Collaborators attempting collective impact must be in constant communication to discuss what is working well, what is working poorly, and how success metrics are changing.[111]
- **Dedicated Backbone of Support:** Every attempt at collective impact needs a dedicated, independent team to guide the overall effort and keep collaborators on track.[112]

Using market-focused collaboration frameworks

The frameworks outlined above are intended to guide thinking around collaborating in market systems. These frameworks can be used on their own or in conjunction with one another: for instance, an organization could choose to join a consortium-style collaboration in service of collective impact and unlocking potential in ecosystems of shared value. The most important factor, however, is the deliberate attention paid to the aspects of your organization's individual situation and needs. Does your organization have the necessary expertise to evaluate proper solutions? If so, perhaps consider a hierarchical governance. Does your planned collaboration create value through economies of skill? Ensure you have your value capture and delivery planned in a way that agrees with a specialization collaboration model. Collaboration is not mutually exclusive with capitalist markets: with careful planning and preparation, collaborative efforts can bring huge success to market-driven organizations.

> "Collaboration is **not mutually exclusive** with capitalist markets.

Collaboration with large teams

What changes as a team gets bigger

Topic
Care & Ethics

Author
Will Rutter

Collaboration with large teams poses unique difficulties not present with smaller groups of collaborators. The larger a team gets, the more difficult communication becomes as more robust infrastructure is required to transmit ideas clearly and accurately.[113] Further, larger teams generally introduce more distinct hierarchies and require more complex managerial or leadership regimes.[114] Large teams can also be highly interdisciplinary, involving collaborators from different backgrounds with diverse points of view on the world.[115] The larger teams get, the more involved these complications become and the more challenging a successful collaboration can be to support.

The spectrum of large-scale collaboration

Due to its size, large scale collaboration creates opportunities for many different and unique collaborative architectures. Large scale collaborations can have strict and complicated hierarchies,[116] like that often seen in large corporations, or very flat hierarchies, like that found on internet forums.[117] Collaborative products can be created with input from various sources editing and building upon each other's contributions, or they can be simple amalgamations of collaborator input.[118] Collaborators may be closely involved with one another, or not know each other in any way.[119]

In any case of large scale collaboration, however, there is a common theme: must be some degree of shared understanding or direction communicated and implemented throughout the collaborative community[120,121,122]. This is the main challenge as collaborations get very large, and underpins the success of every successful large-scale collaboration.

Recommendations for mass collaboration

Large-scale collaboration can be very powerful, but requires careful planning and preparation to see success. The following recommendations are intended to set large scale collaborators up for such success:

Carefully plan management and alignment: in very large teams, management and alignment is perhaps the greatest challenge. Ensuring that there is an efficient and effective infrastructure to keep collaborators aligned in large scale collaboration is key to the collaboration's success. This can be done through widespread direct management, creating a multi-layered hierarchy, through automated communication to each collaborator through a tool like email, or other creative methods of ensuring each team member is on the same page.[123]

Ensure that people feel like people: in very large collaborations, individuals can easily begin to feel like cogs in a large machine and lose commitment to the collaborations or burn out. Ensuring that there is space for each individual to practice their individuality, either through the collaborative work-product itself or interaction with other collaborators, will help each team member feel like their presence in even the largest collaboration is valuable.[124]

Embrace Diversity of Thought: as collaborations become very large, it is unavoidable that the pool of collaborators will become diverse with respect to many facets of identity and background. In order for a large scale collaboration to be successful, this diversity must be embraced and used to augment, not fragment, the larger collaborative mission.[125]

"Ensure that people **feel like people.**

An avant-garde idea: emergence

Large scale collaborations present opportunities for a philosophical idea called emergence to surface. Emergence is a theoretical phenomenon wherein large groups of individuals create complex effects that cannot be explained simply by the actions of individuals. Those who believe theories of emergence hold water often point to the animal kingdom for evidence of emergence, citing examples like ants colonies as incredibly complex creations made by fairly uncomplicated individuals. While emergence may or may not even be real, it is reasonable to be aware that collaboration with very large teams could exhibit emergent effects and create teams that are truly greater than the sum of their parts.[126]

intra-team relations

Psychological safety
How to your keep teammates feeling safe and happy.

Timothy Liu

Conflict management
Manage diagreements and find compromises.

Jamie Park

Work/Life balance
Learn to manage workplace relationships.

Timothy Liu

Psychological safety

Psychological safety was referenced in an earlier chapter in the context of safe spaces. In this section, we'll discuss psychological safety at a more conceptual level in order to understand how and why it benefits teams.

Topic
Intra-team relations

Author
Eileen Chen & Timothy Liu

What is psychological safety?

Nembhard and Edmonson define psychological safety as "the general belief that one is comfortable being oneself—being open, authentic, and direct—in a particular setting or role".[129] It is important to note that psychological safety is not being really good friends with your team members or a lack of pressure. It is a climate created where individuals feel that they are able to speak their mind and have productive discussions without being judged or criticized.[130]

How can it be developed in team settings?

Amy Edmundson suggests three steps to developing psychological safety in *The Fearless Organization*. First, team leaders must set the stage for members to feel comfortable contributing any insights they may have about events or happenings within the group. For instance, in the event of an accident, it's harmful to immediately assign blame to a specific individual because that prevents others from sharing their full thoughts on the matter. Next, leaders must learn to invite participation through the way they pose questions and inquiries. Framing questions using aspirational and far-reaching terms encourages members to introspect and consider all the possibilities before they speak up, which leads to more insightful and useful contributions. Finally, Edmundson encourages leaders to respond productively by destigmatizing failure and expressing appreciation. People are more likely to continue speaking up when they experience positive affirmation, and less likely to when their words are met with scorn. The best thing a leader can do is express gratitude and encouragement when members take the time to share their thoughts.[131]

How does it foster feelings of belonging?

Psychological safety ensures that individuals feel comfortable speaking up and asking questions that they have without feeling that they will be embarrassed or judged.[132] They are more likely to feel that they belong in a safe space where they can be their true selves and their voices are being heard. This fosters team members' confidence and self-efficacy, giving them space to take risks, make mistakes, and grow as individuals and a team.

Teaching team members how to create an environment where psychological safety is promoted will in turn teach them how to be empathetic and listen. Members ultimately share their feelings and learn from each others' thoughts and needs, creating a sense of belonging that comes with comfort being themselves, connection among colleagues, and contributions being valued.[133]

"Psychological safety... fosters **confidence** and **self-efficacy**.

How does it benefit team productivity?

Psychological safety encourages people to be more open, to take interpersonal risks, and to be willing to express any ideas, thoughts, or concerns.[134] At a high level, psychological safety encourages ideas to be shared that otherwise may not see the light of day. At a cognitive level, positive emotions fostered by psychological safety like trust, curiosity, and confidence spur solution-finding and divergent thinking. Many deem this the "broaden-and-build" mode of positive emotion, which helps team members form cooperative partnerships to better solve complex problems.[135]

Conflict Management

> "Manage conflicts by determining the cause of the issue, comparing the current and desired state, creating an action plan, and providing feedback.

Definition of a conflict & conflict management styles

Topic
Conflict Management

Author
Jamie Park

A **conflict** is a disagreement that arises while working as a team. Conflicts may arise when choosing an idea that will shape the rest of the project or deciding which part of the project to prioritize. It is important to wisely come to decisions, as a conflict may harm relationships and can affect the team dynamics. [136]

Although a conflict can harm the relationships, there are also positive sides to it. A conflict can bring in new perspectives and ideas about the work and about the team member. One might have a better understanding of their teammates after a conflict.[137] A conflict may also bond the team members as they spend time on their decision-making and problem-solving process to tackle the issue. During this phase, the team members may learn to appreciate and respect their differences.[138]

There are three conflict management styles. One is a **cooperative (compromising) style**, where the team member has high-level concern for both self and the other party.

A cooperative teammate will likely try to find compromising solutions to prevent harming people's feelings. However, a **competitive style** member has a high level of self concern but low level towards others.[139] Another way of managing conflict is **avoiding** the problem by pretending it does not exist. Although it may be inaccurate to claim that avoiding the problem is a management style, this method is commonly used during team disputes. [140]

There may be multiple causes to a conflict while working with other people. A few of the possible reasons may be scarce resources and thus higher competition for the resources, or perceived differences among the members. But the most common reasons during today's context would be **faulty communication** and misunderstanding, or the **lack of sleep.** It has been scientifically proven that people have less tolerance for dispute and ambiguity when they are sleep deprived.[141] It might be very challenging for someone who is tired to not get into arguments. But in such cases, how should people manage a conflict?

How to manage people conflicts

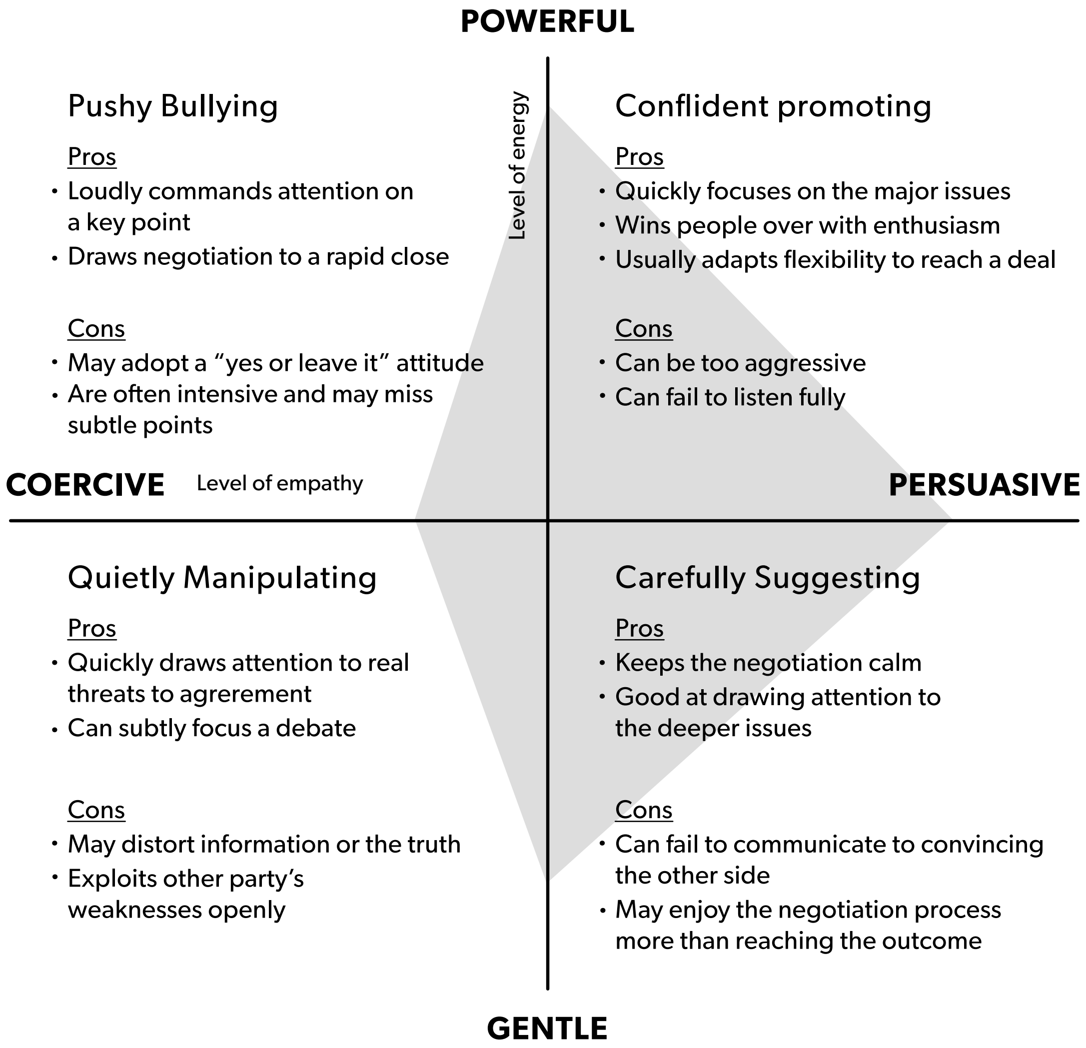
Topic
Conflict Management

Author
Jamie Park

- **Determine the cause of the issue.**
  When managing a conflict, determine the root cause of the conflict. Is it because of the different expectations around how much work to be done? Is it because the person does not have enough time, energy, information, or technology? Does the person not have the expertise? Does the person not have an appropriate level of commitment or interest? Knowing why the issue is occurring will help the teammates understand the situation and how to deal with it. [142]
- **Do an analysis of current and desired state.**
  Reach an agreement on the desired change, improvement, and result between the team members. Ensure to align the goals so the members have the same vision of the project outcome. Creating a shared agreement on the importance of the project. If possible, facilitate an "I want to" mindset instead of an "I need to" mindset to motivate the team. [143]
- **Create a detailed plan to close the gap.**
  What should the team to do meet the ideal state? Create a series of action plan to push the plan forward and bring it to life. Consider encouraging the individual members to have ownership and responsibility of their part.[144]
- **Provide feedback.**
  Check in with people to ensure that the project is still on track. Set specific dates to review progress, and do not wait too long for the first meeting. It might not be a good idea to constantly check in, however, as the action may make someone think that the other members do not trust them. [145]

This may not be the perfect way to deal with all conflicts. It is advised to adjust the solution based on the situation. But do not forget to keep a positive attitude — negative emotions may only harm relationships.

How to Negotiate



Source: J Warner, Negotiation Skills, Tam Publication, Varisty Lakes, p.35

Negotiation may need to occur during projects, whether big or small. When negotiating with the "other side," consider the goals, mutual interests, stakeholders, and time constraints of both parties. Having a thorough understanding of the motivations also helps understand where the person is coming from.

When negotiating with the other party, consider using nonverbal, listening and questioning, and persuasive skills to be more convincing. There are four methods to negotiation as charted above. Assess what type of negotiation tactic may be appropriate to the situation and what tone the information should be delivered to successfully convince the other side.[146]

Topic
Conflict Man-agement
Author
Jamie Park

Work/Life balance

"I'm here to work, not make friends."

There tends to be a stigma around mixing your friends from the office and friends from home, but well-developed workplaces will actively encourage employees to foster social connections and build relationships with their teams.[147] Studies have found that strong workplace relationships lead to less stress, higher productivity, and improved employee health, so it's imperative for leaders to keep team members loose and comfortable with their work settings.[148] But the best way to do so is to test the temperature of your team; if people want more time away from the office, don't force them to stick around just for the sake of camaraderie. Striking a balance between individual and collective needs can massively benefit teams.

Topic
Intra-team relations

Author
Timothy Liu

Can our personal lives benefit the work we do as a team?

Employees who feel comfortable with their work-life balance tend to be more motivated, engaged, focused, and driven at work because they buy in more to team-wide philosophies.[149] Not only do social connections with our teammates make us happier, but they also encourage us to think more creatively and experiment more with projects and tasks. This ties into notions of psychological safety that indicate how effectively team members work when they feel valued and comfortable around their peers. Promoting work-life balance can improve communication and overall productivity among teams.[150]

Many struggle to align their work activities with at-home leisure.[19]

evaluation criteria

About it
What is the overall purpose of using this in your own team?

Jina Lee

Types of Criteria
What kind of evaluations are out there?

Jina Lee

Overview
How teams can implement these criteria

Jina Lee

Evaluations

Intro to evaluation criteria

Before getting started, you must understand what is being measured. In this book, collaboration is used as a way to explain team efforts in all types of situations. All in all, collaboration is a method where two or more people work together towards a common goal by which they need to learn, share, and work together. Bringing back the evaluation aspect of teamwork, it is crucial to look at certain points that are specific to your needs and wants. For example, if your team is more focused on the quality of team performance, you would want to look closely into the individual work and overall work of the team. However, if you are evaluating how well the team works together, you want to look at the team effectiveness based on communication. In the end, the goal of this section is to guide you with multiple options in evaluating your group's evaluation by educating and providing various resources.

Topic
Evaluation Criteria

Author
Jina Lee

What is Collaborative Criteria?

In order to evaluate effectively, collaborators need to be able to successfully find the strengths and weaknesses of the team and their collaboration. This can be done through evaluation tools that will help evaluators be able to see the team's collaborative efforts and assess them based on it. There are many factors that may affect the assessment like "lack of validated tools, undefined or immeasurable community outcomes, the dynamic nature of coalitions, and the length of time typical for interventions to affect community outcomes… the diversity and complexity of collaborations and the increasingly intricate political and organizational structures that pose challenges for evaluation design."[151] In the end, the key is to find a type of evaluation that works best with the team so that the assessment is able to be smoothie established by the collaborators.

Picking the right Evaluation

The two principal factors that need to be pointed out in order to have an objective evaluation for collaborating teams are 1. quantifying changes in team performance to determine the extent to which a new technology, process, or organization improves team effectiveness and 2. explaining the reasons for changes in effectiveness.

Forecast System[152]:
This is a popular tool that uses markers and indicators that help in measuring the progress through levels of fulfillment. The purpose of using phases as a way to evaluate is so that it establishes the main focus for the analytics allowing the measurement to be more itemized when being assessed.

- Phase 1: Form collaborations with consideration of context and characteristics of organizations by making tasks that are necessary to assessing feasibility; mobilizing stakeholders; exploring interests; developing relationships and understandings.
  What is the extent of readiness? What are the extent and levels of participation?

- Phase 2: Set direction by having tasks are creating vision; assessing community assets and needs, then developing goals, objectives, and action plans.
  Does the vision communicate direction? Does it inspire action?

- Phase 3: Organize for implementation by developing operating and coordinating structures; assuring communication systems are established and working; assessing and building capacity.

- Phase 4: Implement maintain and renew by adding collaborative activities; communicating progress and accomplishments; conducting renewal sessions.
  What are the array and nature of activities, and participation? What are the emerging/declining sector, organization participation? What are the interim system change outcomes?

- Phase 5: Achieve and confirm results by achieving changes in human and community conditions; securing changes in policies, structures, and procedures of the organizations; evaluating outcomes.
  What are the extent and value of collaborative program outcomes ?

- Phase 6: Institutionalize and Transform by integrating functions into ongoing organizations; ensuring community capacity to sustain efforts, and transforming collaborative to new direction or ending.
  What are the institutional components of the collaborative efforts?

Goal of Objective Performance Measures[153]:
Another method to start is by using Objective Performance Measures as a way to quantify performance like asking participants questions about the situation to get a better grasp of the situation. Then, the evaluator will grade the answers by using an answer key that was generated by subject matter experts.

This method helps document a "credible causal audit trail able to explain the reasons for the performance impact."[154] Headquarters Effectiveness Assessment Tool (HEAT)[155] was the first to pioneer the use of objective measures. This model focused on information processing and flow within a headquarters.

Objective Measures for Situation Assessment[156]:
This type of evaluation helps teams understand the external situation of their collaboration. This method is typically used for the military. This type of way helps find the identity of the locations of hostile and friendly

> "The type of criteria that is decided for a team should best cater to the overall goal of everyone

collaborations to bring about concerns of potential risks and opportunities. This method is one of the more straight-forward ways for collecting data as it is "a less intrusive way of obtaining the needed information because the participant is playing the role of the leader to ask their team members for their assessments or to ask them to prepare a briefing on assessments."[157]

- Example questions to evaluate a situation assessment:

Whos is doing y? ("y" is an activity)

What are the actions they are most likely to do next?

What are the situation factors to be most concerned about now?

What are the situation factors that might have the greatest impact on y?

How certain is each of these factors?

What information is able to resolve these uncertainties?

What are our greatest risks and opportunities?

What are the different possible ways that x and can react to y?

What will be the first cues that x is responding in each of these ways?

Objective Measures for Plans:[158]
This type of measure is a way to employ three types of measures to plan quality measures. The first type avoids any requirement for subjective assessment on quality, so that evaluators are able to measure the usefulness of the plan. The second type of measure requires an assessment key that the plan evaluators can create by reviewing mission orders and leader discussions. A third type of measure requires an expert's answer key that enumerates the issues that a good plan should address. Because these issues may not have been made explicit in command orders, their enumeration requires expert judgment.[159]

Researchers involved in these concepts[160]:
Starting off, researchers Mattesich and Monesy and helped with outlining Evaluation Criteria by creating the six categories for typical characteristics of collaborations. From there, Marek, et al was able to add on to those theories and create the Collaboration Assessment Act (CAT).

- *Context: the shared history among coalition partners, the context in which they function, and the coalition's role within the community*
- *Membership: individual coalition members' skills, attitudes, and beliefs that together contribute to, or detract from, successful outcomes*
- *Process/Structure: process and organizational factors like flexibility and adaptability of members' clear understanding of their roles and responsibilities*
- *Communication: formal and informal communication among members, and communication with the community*
- *Function: the determination and articulation of coalition goals*
- *Resources: the coordination of financial and human resources required for the coalition to achieve its goal*
- *Leadership: strong leadership skills, including organizing and relationship - building skills*

From there, Marek, et al., argue for seven key factors that typify successful inter-organizational collaborations and coalitions by creating CAT. Marek et al. offers this tool for assessing the effectiveness of collaboration which consists of sixty-nine questions that identify the factors above.

"Confirmatory factor analysis of the CAT validated the proposed model with all seven collaboration factors demonstrating strong internal consistency. Concurrent validity was established through expected positive intercorrelations between the factors as well as strong positive correlations with the perceived success of collaborative efforts. As evaluators are increasingly asked to evaluate collaborations and coalitions, this conceptual model and tool can provide evaluators with a grounded, reliable, and valid assessment instrument to work with clients to build collaborative efforts in an intentional, comprehensive, and effective manner."[161]

Guide To Assessing Teamwork and Collaboration:[162]
In this tool, the main focus is on the team members and not leadership as it is emphasized that collaboration "does not require leadership and can sometimes bring better results through decentralization and egalitarianism."[163] The main criteria are team members actively participate in the task or project to accomplish a common goal, team members participate in decision-making, team adjusts to unforeseen circumstances, and team members use their diversity to build strength. From each of the criteria, there are levels of scale that are mentioned to get a stronger understanding of where the collaboration stands -- is it more structured and recursive or is there some strain that is causing more risks than opportunities.

Picking the right Evaluation

Overall, these methods are here to be used as resources for team's to potentially use based on their own situations. All in all, there is a strong articulation that a collaboration should be evaluated on the basis of the criteria being established by the collaborators as a whole. In those cases, it in itself is a way to test collaborative efforts while evaluating themselves together.

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