Task:

Develop a series of questions to ask these target users to understand what *problems* they might have with teamwork-driven communication tools that are currently unsolved by your team's tool.

Name:
Email:

1. What tool are you most familiar with for teamwork-driven communications

2. When using this tool, what issues, if any, do you experience with the following:

   - signing up for the tool

   - forming groups and communicating with group members

   - moderating/controlling communications

   - security of communications

   - sharing media

   - navigating the tool's functions (learning how to use the tool)

   - troubleshooting technical problems

3. What functionality would you add to the tool that it currently does not have

4. What problems does an effective teamwork-driven communication tool solve for you

Key: proposed solution in **Bold**

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What tool are you most familiar with for teamwork-driven communications	Microsoft Teams.	Zoom, also use Email, MS Teams, Whatsapp, Signal, SMS, Facebook, Google.	Microsoft Teams	messenger
When using this tool, what issues, if any, do you experience with the following: signing up for the tool		have to sign up to multiple devices one at a time eg loading app on desktop, then ipad, then phone **App loads up on multiple devices at once**	Teams is intertwined with the entire Microsoft 365 range of online products, making it sometimes difficult to navigate the signup for those not expecting to be dragged into the wider microsoft sign up process. **NA streams is not attached to other tools**	
forming groups and communicating with group members		Issue - chat seems to disappear when a session is ended **Retain channel information temporarily after deletion and offer a recover function**	There's teams and group chats - it's hard to parse the difference between the two. Whilst they both had very different functions they ended up being used for the same thing **Streams can have**	

		constant mistake of 'youre on mute' **NA streams does not have video chat**	**sub-channels that are clearly listed under the original channel** **DMs being noticeably different (NA)**	
moderating / controlling communications		Issue: it is too easy for someone to send a chat to the wrong person/group. Someone did this today – sent a criticism of the interviewee to the group chat instead of to the other interviewer! **NA this is an issue solved with front end design**		
security of communications		Issue: law firms and banks won't use zoom out of fear of security breach **Further encode users and channels**		anyone can be added to the group. anonymous screenshots and photo saves are allowed **A function which lists who has seen / recorded any media in DM's and Channels**
sharing media	When someone put a MS Office document or PPT into Teams, anyone on the chat can edit it. However,	Issue: files and links seem to disappear when the zoom session ends.		not all file types can be sent **Have a decoding function which accepts all file types**

	the functionality is very limited. So for example, it is frustrating when someone uploads a PPT into the chat and asks teammates to edit it. You can only do the most basic edits (eg changing text). But any more sophisticated edits can't be done inside the Teams. You need to download the PPT, edit it in the full desktop PPT app, and then re-upload the PPT back into teams. This is annoying. Microsoft should find a way to have the full PPT functionality available when viewing and editing a PPT in Teams itself. **Have a function which opens different editing programs within the browser of Teams**	**Retain this information after close temporarily**		

navigating the tool's functions		Issue: don't use all functionality and lack time to learn how **Establish a HELP page and have a established DM with a technician**		
troubleshooting technical problems		Issue: no obvious way to get help with some who will chat to you or text with you **Establish a HELP page and have a established DM with a technician**		
What functionality would you add to the tool that it currently does not have	Also, Teams' videoconferencing capability is not as good as Zoom's, especially when running a large group call, where you want to facilitate and move people in and out of breakout rooms. Zoom does a better job of this that MS Teams. **NA streams does not have video chat**		Make a clearer distinction between functions. Either that, or make their separate functionality clearer at the beginning. **Provide a preview of the changes made by applicable functions and choose whether to make the change or not**	More features
What problems does an	MS Teams allows anyone in the team	●allows me to communicate with people in a problem-solving group at any		Idea communication, work critique, calls to explain issues

effective teamwork-driven communication tool solve for you	to collaborate with each other. You can easily set up new groups, based around whatever you like - eg create a new group for a specific project or location or whatever you like. It does a good job in integrating video calls and audio calls, so it's really easy to have a quick video call with someone or a group of people	time of night or day whether they are on-line or not ●keeps discussion thread and docs so we can refer back to them at any time ●has multiple ways of communicating so we can change as suits eg text messages, emails, video conference and phone te		

Applicable Issues:

Issue: no obvious way to get help with some who will chat to you or text with you (cindy)
Establish a HELP page and have a established DM with a technician

Issue: files and links seem to disappear when the zoom session ends. (cindy)
Retain this information after close temporarily

Issue: law firms and banks won't use zoom out of fear of security breach (cindy)
Further encode users and channels

Issue: When someone puts a MS Office document or PPT into Teams, anyone on the chat can edit it. However, the functionality is very limited. So for example, it is frustrating when someone uploads a PPT into the chat and asks teammates to edit it. You can only do the most basic edits (eg changing text). But any more sophisticated edits can't be done inside the Teams. You need to download the PPT, edit it in the full desktop PPT app, and then re-upload the PPT back into teams. This is annoying. Microsoft should find a way to have the full PPT functionality available when viewing and editing a PPT in Teams itself. (Rev)
Have a function which opens different editing programs within the browser of Teams

There's teams and group chats - it's hard to parse the difference between the two. Whilst they both had very different functions they ended up being used for the same thing (Miles)
Streams can have sub-channels that are clearly listed under the original channel

Not all file types can be sent (Elliot)
Have a decoding function which accepts all file

anonymous screenshots and photo saves are allowed (Elliot)
A function which lists who has seen / recorded any media in DM's and Channels

Make a clearer distinction between functions. Either that, or make their separate functionality clearer at the beginning. (Miles)
Provide a preview of the changes made by applicable functions then choose whether to make the change or not

User Stories and acceptance criteria written below:

As a general user I want a way to directly communicate with a technician, so I can better understand how to use the application and troubleshoot problems. (cindy)
- Given a user has technical problem, there exists a dedicated technician DM that everyone has immediate access to

As a channel owner, I want a way to recover the channel's messages and media, so It isn't lost if I accidentally delete the channel (cindy)
- Given I delete a channel, keep a temporary copy of the channels information that is cleared after some time or is reverted by the owner

As a lawyer, I want the tools information to be securely encrypted, so nothing is stolen (cindy)
- Given I have sensitive information, streams has encryption techniques that apply to both user, dm and channel information

As a corporate, I want to be able to edit any file type within the app, so file collaboration is more streamline (rev)
- Given I am sent an editable file type, the stream has a way of opening the designated editor within the streams browser

As a team coordinator, I want to be able to have smaller channels within my original channel, so I can split teamwork up more effectively (miles)
- Given that I have sub groups I want to coordinate in one channel, Have a function which splits listed people into sub channels

As a general user, I want to know if someone has seen or recorded anything I put into the channel, so I can be sure my information is not shared without my knowledge (elliot)
- Given I have shared something sensitive, when someone reads or records the shared information make it visible

As a team coordinator, I want to be able to see what each function does before I use it, so I don't make irreversible coordination mistakes (Miles)
- GIven I don't fully understand a function, show a preview of the changes a function will make and make the revertable

Name & Description	HTTP Method	Data Types	Exceptions
dm/join/technician Given a user has a technical problem when entering a channel, there exists a dedicated technician DM that everyone has immediate access to	POST	Parameters: { token, channel_id } Return Type: {}	**InputError** when any of: ● channel_id does not refer to a valid channel ● token does not refer to a valid user
channel/saveinfo Given a channel owner deletes a channel, keep a temporary copy of the channel's information that is cleared after some time or until it is reverted by the channel owner.	GET	Parameters: { token, channel_id } Return Type: {}	**InputError** when any of: ● channel_id does not refer to a valid channel ● token does not refer to a valid user **AccessError** when: ● channel_id is valid and the authorised user is not an owner of the channel

user/encode Given the nature of sensitive information, streams has encryption techniques that apply to user creation and user information editing processes.	POST	Parameters: { token } Return Type: {}	**InputError** when any of: • token does not refer to a valid user
channel/encode Given the nature of sensitive information, streams has encryption techniques that apply to channel creation and channel information editing processes.	POST	Parameters: { token, channel_id } Return Type: {}	**InputError** when any of: • channel_id does not refer to a valid channel • token does not refer to a valid user
dm/encode Given the nature of sensitive information, streams has encryption techniques that apply to DM creation and DM information editing processes.	POST	Parameters: { token, dm_id } Return Type: {}	**InputError** when any of: • dm_id does not refer to a valid dm • token does not refer to a valid user

message/decode Given the nature of sensitive information, streams has encryption techniques that apply to message creation and message information editing processes.	POST	Parameters: { token, message_id } Return Type: {}	**InputError** when any of: ● message_id does not refer to a valid message ● token does not refer to a valid user **AccessError** when: ● message_id is valid and the authorised user is not a member of the channel/dm the message belongs to
channel/editfile Given messages of editable file types are received in the channel, the stream can open the designated editor within the application for changes to be made.	POST	Parameters: { token, channel_id, message_id } Return Type: {}	**InputError** when any of: ● message_id does not refer to a valid message ● channel_id does not refer to a valid channel ● token does not refer to a valid user **AccessError** when: ● message_id is valid and the authorised user is not a member of the channel/dm the message belongs to

dm/editfile Given messages of editable file types are received in the DM, the stream can open the designated editor within the application for changes to be made.	POST	Parameters: { token, dm_id, message_id } Return Type: {}	**InputError** when any of: ● message_id does not refer to a valid message ● dm_id does not refer to a valid channel ● token does not refer to a valid user **AccessError** when: ● message_id is valid and the authorised user is not a member of the channel/dm the message belongs to
channel/subgroups A channel can be divided into sub-groups within that same channel that act as sub-channels. Members in the parent channel can be assigned into sub-channels by the channel owner.	POST	Parameters: { token, channel_id } Return Type: {}	**InputError** when any of: ● channel_id does not refer to a valid channel ● token does not refer to a valid user **AccessError** when: ● the authorised user is not a member of the channel

channel/recordviews Given I have shared something sensitive, when someone reads or records the shared information makes it visible.	GET	Parameters: { token, channel_id } Return Type: {}	**InputError** when any of: ● channel_id does not refer to a valid channel ● token does not refer to a valid user **AccessError** when: ● the authorised user is not a member of the channel
function/preview Given I use a function, a temporary preview of the front end data changes is shown before confirming the use of the function.	POST	Parameters: { token, function_name } Return Type: {}	**InputError** when any of: ● function_name does not refer to a valid function ● token does not refer to a valid user **AccessError** when: ● the authorised user is not permitted to perform the specified function

Validation:

As a general user I want a way to directly communicate with a technician, so I can better understand how to use the application and troubleshoot problems. (cindy)
- Given a user has a technical problem when entering a channel, there exists a dedicated technician DM that everyone has immediate access to

Response:
'This would solve my problem, however, a dedicated technician is very expensive, are you sure you wouldn't rather consider volunteer community members who log on to answer questions when they are logged on'

As a channel owner, I want a way to recover the channel's messages and media, so It isn't lost if I accidentally delete the channel (cindy)
- Given a channel owner deletes a channel, keep a temporary copy of the channel's information that is cleared after some time or until it is reverted by the channel owner.

Response:
'This is a solution, however why make it temporary, could you archive it to have permanent access at any time?'

As a lawyer, I want the tools information to be securely encrypted, so nothing is stolen (cindy)
- Given the nature of sensitive information, streams has encryption techniques that apply to user creation and user information editing processes.
- Given the nature of sensitive information, streams has encryption techniques that apply to message creation and message information editing processes.
- Given the nature of sensitive information, streams has encryption techniques that apply to DM creation and DM information editing processes.

Response:
'This would help with protecting the content, I'd still want a guarantee that no unapproved participants would be unable to join the channels and therefore access their content.'

As a corporate, I want to be able to edit any file type within the app, so file collaboration is more streamline (rev)
- Given messages of editable file types are received in the channel, the stream can open the designated editor within the application for changes to be made.

Response:
'If it is a guarantee the site can access the most popular file sharing apps that would be useful, but if it was a universal editor native to your tool that would solve the problem entirely, because people would not have to logon to different apps'

As a team coordinator, I want to be able to have smaller channels within my original channel, so I can split teamwork up more effectively (miles)
- A channel can be divided into sub-groups within that same channel that act as sub-channels. Members in the parent channel can be assigned into sub-channels by the channel owner.

Response:
 'That sounds great!'

As a general user, I want to know if someone has seen or recorded anything I put into the channel, so I can be sure my information is not shared without my knowledge (elliot)
- Given I have shared something sensitive, when someone reads or records the shared information makes it visible.

Response:
 'Amazing! But can you know if someone is screen recording the application'

As a team coordinator, I want to be able to see what each function does before I use it, so I don't make irreversible coordination mistakes (Miles)
- Given I use a function, a temporary preview of the front end data changes is shown before confirming the use of the function.

Response:
'Yep, but I think sometimes not all changes could be visually previewed and would need a description instead.'

State diagram

Register user

Create channel

Create DM

Enter sub-channels
Feature

Encrypt information & onboarding
Function

Preview function changes
Function

Change user/channel/dm information

Create sub-channels
Function

Is assigned member

Is owner

Enter channel / DM

Record viewership
Function

Delete channel / DM

Is owner

Keep temporary record of information
Function

Access Error

Technical issues

Access Error

Enter technician DM
Feature

Attach file in channel / DM

Save media files in channel / DM

Record who has saved media
Function

Encrypt information
Function

Decoding function for all file types
Function

Open file in designated editor in Streams browser
Function

View editable file in editor

Send file in channel / DM