**Slack – Contextual Inquiry Report**

SWEN 651 – Fall 2020

**Debashis Jena**

University of Maryland Global Campus

# Executive Summary

Slack is an instant messenger at its core. However, Slack has brought many more features to its stack, that has made it such a powerful team collaboration software tool. It may be used by individuals, students, and companies. Slack became very popular in the year of 2015 because it was a lightweight software and it had so many features that were lucrative for professionals.

Some of the features that Slack is proud of are:

1. Direct messages along with group chats, which can be a private chat or a public one.
2. Audio/video calls with screen shares which allows drawing annotations.
3. Slack bot for several automations like adding reminders just with an instant message or archiving old chats.
4. Integration with many services across multiple categories, which lets you access your data or activities from Slack itself. For example, integration with Outlook Calendar lets you view your meetings in an IM, without going to the Outlook app.
5. The ability to create custom bots adds more power to Slack since the developers can add many more features making it a one-stop application.

Many other popular tools used for a similar purpose may be Microsoft Teams, Workplace by Facebook, RingCentral Glip, Salesforce Chatter. However, Slack being so young in the market has made an impact in the corporate world. Many of the features still need a fair amount of redesigning to make it more competitive with other competitive apps. Users are unaware of several hidden features which can be utilized to a great extent. Slack does not make them apparent for the users who are more comfortable with typical buttons and self-explanatory user interfaces, thus making the feature hidden from most of the users. Many other features need to be made more visible to users.

This document is meant to interview two users and watch them using the application starting from the installation to using it fully. Contextual inquiry is a great process to find out how user friendly an application is with the users from varying experiences. In this report, two persons from completely different background and with different experience level, installed and used the application. It was a great session where they could be seen how they are navigating through the system to perform various actions.

For this session, two people were selected to go through Slack. In their past they have no experience using it. However, each of them has used other similar application as part of their day-to-day activities. Being a novice user, Naresh had no issues while installing Slack, however he had a few difficulties while using the application for the first time. Ajim is a technology savvy person who also did not have any issues while installing the application. Unlike Naresh, he did not face any problems while using Slack but he also recommended a few changes that would really help the users to take the most advantage of the application.

# Participants

1. **Naresh**

Naresh is a laboratory assistant in Food and Drug administration. He was born and brought up in a small town in India. He did most of his higher studies in the United States. He finished his masters degree in food science from University of Nebraska – Lincoln. Currently as he works for the government organization, he is also pusuing the doctorate degree in the same university. He is 36 years old and married to his wife for last 11 years. They have a 5 years old son and goes to kinder garten this fall. They currently live in a city called Peoria in the suburbs of Illinois. He likes to spend most of his time with his son and also likes playing tennis in the weekends. He always has a desire to give back to the community or do something for the needy ones. He likes travelling and he had plans to visit Hawaiian islands this year. However he had to cancel his plan for the pandemic situation.

As part of his job, he mostly assists the scientists in many experiments on the food or drug. He helps them in asserting or certifying new products. Even though their job revolves around the food science and mostly in the laboratories, yet they use computers to accomplish many things in their department such as taking notes, lab related softwares. Their system administrator helps them with the installation of the softwares. They use many basic Microsoft office applications like Outlook, word and excel in their day-to-day life. Naresh was chosen for this interview, because he does not use the softwares for his work or not too proficient using modern hi-tech application. He acted as a novice user for the application. Our interview session was on 29th September 2020 when he was home right after work. This session was about an hour where we both used Dell computers with Windows operating system installed in them.

1. **Ajim** –

Ajim works as a lead software solutions architect in one of the leading IT services companies in the country. He was also born in the city of New Delhi in India. Since his childhood, he has been very comfortable with computers and related accessories. He graduated from his masters SUNY – The State University of New York in the year of 2010. Since then he has been working as a Software engineer. He is 36 years old and lives with his wife and daughter, in the city of Reno, Nevada. He likes to cook Indian food whenever he gets an opportunity. Playing cricket in the weekends is also one of his hobbies.

Being into the field of information technology, it makes him use the computers all the time. As his job description says, his responsibilities include to create frameworks for test preparation and execution for various applications that are under development. His teams do perform mixture of manual and automated testing. He has used many similar applications as Slack in his past and has ample of experience with the related software. Our interview session was held on October 6th, 2020. It was a great session as we went through different features of Slack and collected many points about the great features and some of the suggested recommendations.

# Findings

1. **Naresh**

Being a novice user, Naresh expected Slack to be very similar to the instant messaging applications that he has used in his past. In his day job, he communicates with his team mates using the instant messaging application from Microsoft. In the session it was seemingly noticed that he was hoping things similar to the application he already has experience with. Here are a few bullet points that could be extracted from the session I had with him.

* 1. Installation of the application – Being an open source application, Slack can be downloaded from the internet for free. That is what Naresh did as well. He found the application download was quick. As he tried to install, it got installed without asking for much questions or without any “Installation Wizard” window. He found the installation was easy and quick.
  2. Account creation – Slack requires you to create a free user account. It did not ask for a password to sign up for which Naresh seemed to be a little confused. Instead, it sent an email with a 6 digit code which it asked to enter in the login window. Naresh was concerned as well because he thought if his email account is hacked, the slack can be easily hacked too.
  3. Attachment preview – As Naresh tried to test the attachment feature of Slack instant messaging, he found it user friendly. However, when he tried to open the attachment from the IM window right before sending the message, it did not let him as it showed in “Delete Only” mode. He was hoping if he can open the attachment to ensure if he is sending the correct attachment or not.
  4. Conference call – Naresh was glad to see the voice call feature within slack. However, when he tried to add another user for the call, he tried to click the “Add” button. But it did not do anything, since Slack does not let you do a conference call unless you possess a paid license. They have a message at the top of the screen stating the same too. However, it is not evident for the users who do not really like to read these tiny messages.
  5. Chat during voice calls – Microsoft Teams or Cisco Jabber opens the voice call window on the same IM window. Naresh was expecting the similar feature in Slack as well. However, Slack opens a completely separate window for the voice calls where the users can share their desktop. If the user desires to send messages while on the call, s/he has to toggle between the windows, which Naresh did not find to be very user friendly.

1. **Ajim**

Ajim seemed to have some prior knowledge on Slack, even though he has not used the application ever. He possesses ample of experience with many software applications in past which makes it easy for him to use any new applications. As he used a macOs to install the application and play around, that gave me a great opportunity to observe how Slack behaves in a different operative system. Here are a few findings listed below.

* 1. Installation of the app – With a macOs, the installation looked a little different than the Windows operating system. Ajim installed Zoom application for our session right before he played around Slack. He noticed Zoom opens up an installation wizard window which he just clicked thorugh Next button and it got installed and it opened right after the installation. However, for slack, he had to move the executable app file from the installation drive to the Applications folder. Then he had to open the app from the applications.
  2. Users in default channels – When Ajim opened and setup the new Slack account, he entered a new channel name. The new channel got added to the list of default channels that included “#general” and “#random”. When he added new teammates to the org, he noticed that the users are automatically added to all the default added channels. As an experienced user, he feels it might be an issue of privacy.
  3. Commands for installed apps – Ajim tried adding external apps to Slack. For example, he tried to integrate Zoom to Slack. As the third party application was added to Slack, it prompts a few useful commands that can be used to automate the actions for the application. When he liked the commands, but struggled to use them. For example, the zoom app prompts ‘/zoom Start a meeting’, in which they have highlighted the word ‘/zoom’ in it. Ajim kept typing the full sentence ‘/zoom Start a meeting’, which apparently did not work. The application would do the functions if only ‘/zoom’ is typed and sent as a message.
  4. Reminders within Slack – The shortcut feature in Slack is useful as it can perform many things like adding a reminder, actions within the third party apps. As Ajim tried the reminder functionalities, he liked it as it was user friendly. However, to view the list of reminders, he was asked to type a specific chat message. He expected to see the list in a separate place, which might be more user friendly.

**User Matrix**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Naresh (Lab Assistant) | Ajim (Software Engineer) |
| 1 | What are the user's goals related to the use of this software/website? | Working within a team of scientists and other laboratory assistants, requires him to use an instant messenger system. | For any software development purpose, a instant messenger with additional communication features is a absolute requirement. |
| 2 | What tasks do they currently do to achieve these goals? | Naresh uses Cisco’s Jabber for all of his collaboration activities within the team. | Ajim currently uses Microsoft Teams for the communication. |
| 3 | How does user's domain knowledge and prior experience affect their use of the interface? | Naresh has been using Jabber for a while now. He has used Skype in his past too. So he is pretty acquainted with softwares like Slack before. | Ajim has years of experience using different softwares and specifically IM tools like Teams, MS Skype, Lync and Yahoo messengers. So the usage of the functionalities comes naturally to him. |
| 4 | What are the user characteristics that might affect their relationship with the Web? | * Task-oriented * Hands-on * Collaborative | * Self-motivated * Communicative * Goal-oriented * Knowledge of other IM tools |
| 5 | What is the user's physical environment? What tools do they use? How they acquired these tools? | Naresh uses a Dell laptop with Microsoft Windows operating system installed. He works and uses the application, primarily in the work space. | Ajim has an Apple MacBook with MacOs Installed in it. He uses the application on a day-to-day basis. His work hours start with an IM tool everyday. |
| 6 | How do users relate tasks to goals? | Naresh tried to use the functionalities of a Slack conference call but could not as the application requires a paid license. | Ajim tried to use the shortcut commands within Slack, but was one step away from seeing the result. |
| 7 | How do users measure success? | For Naresh, screen share and a conference call within Slack would be the main functionality to call it a one-stop application. | With a lot of experience with many other IM tools, Ajim expects more from Slack, like easy integration with Outlook, setting up meetings just the way Teams does. |
| 8 | Do they accomplish their work alone, with others? What resources (people, information, artifacts) are available to users as they work? | Naresh works with the team mates and other scientists whom he assists. As they need any help, a system admin is always available to offer the help. | Ajim also works with many software development and testing teams. He is self-sufficient for the software applications. However, for any issues, he also reaches out to the System administrators for help or looks for the documentations or self service runbooks available. |
| 9 | Is the task linear, interrupted, or concurrent with other tasks? | Being an employee in FDA lab, requires Naresh to concentrate on the task that he is doing. It requires him to completely focus on the single task he does. He typically prefers not to be distracted. | Being a solutions architect, Ajim is required to work many projects simultaneously. His tasks are more interrupted and concurrent with many other tasks. |

**Recommendations**

For each of the issues that Ajim and Naresh had during the session, they also recommended a solution for them. Here is the list of the recommendations.

1. Installation wizard for all operating systems – Having a installation wizard helps a lot for the novice users. Slack does not have a wizard for Windows operating system, but the installation is no effort at all. The same experience should be added across all the supported operating system.
2. Account creation – With a lot of experience with other online accounts, all the users expect to have a password as part of the authentication. Slack requires all other users to have a password but not for the admin user. Rather it enforces users to have the access to email where they send a code which need to be entered. This should be made consistent.
3. Attachment preview – Slack should let user have a quick peek on the attachments right before hitting the Send button.
4. Conference Calls – For free plans, Slack does not allow conference calls. They show a message at the top. However, it may not be very apparent to the users. It should pop up an error message as the button is clicked.
5. Chat and Call windows – The chat box should be shown under the “Call” window, without making the user toggle between the windows.
6. New teammates – As the teammates are added, Slack should pop up a message asking if it can add the user to all the default public channels or not. That way the admin controls who goes to what channel.
7. Commands in Slack – In third party apps, Slack prompts a few basic commands that can be used to automate a few actions. Those prompts should be displayed in such a way that it conveys the message. For example, in zoom integration, it displays a message as “/zoom Start a meeting”. This should be changed to something like “Type **/zoom** to Start a meeting”.
8. Reminder list – To view all the added reminders, Slack should display section only for that purpose. Currently the user needs to type a message just to see the reminder list.