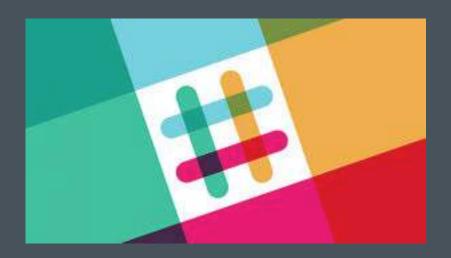


Heuristic Evaluation of MPowered Entrepreneurship's Slack Workspace

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SI 110 Section 003



"You have so little time to attract their attention... every little thing counts."

Stewart Butterfield

Founder of Slack

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SLACK PROVIDES

ORGANIZATION

This report provides an overview of Slack and conducts a heuristic evaluation on Slack's desktop application for the MPowered Entrepreneurship organization. After applying Nielsen's ten heuristics for user interface design on MPowered Entrepreneurship's Slack workspace, results show that Slack is a good replacement for email but can be improved. While Slack gives the user control and freedom of the workspace and offers flexibility and efficiency towards the user's intended actions, there are some design errors, and if fixed, it will be more simple and efficient to utilize for all organizations.

WHAT YOU NEED TO KNOW

... ABOUT SLACK

Slack (Searchable Log of All Conversations and Knowledge) was launched in August 2013 and is cloud-based set of collaboration tools aimed toward small and medium sized businesses and organizations [1]. Each business or organization has its separate account (workspace) and individuals can join Slack workplaces by receiving an invitation sent by a team administrator or owner. Each workspace includes Internet Relay Chat (IRC) functions such as chat rooms (channels), private groups, and direct messages.



Slack thinks with INNOVATION



Slack stands for SIMPLICITY

All of the content inside of Slack is searchable, including keywords, people, conversations, and files.

Slack allows users to communicate without the use of SMS text messaging or email. Users can also share files and have voice or video calls.



Slack encourages COLLABORATION

One unique aspect of Slack is its use of integrations such as Dropbox, Google Drive, Box, SurveyMonkey, GitHub, and more [2].



Slack makes you PRODUCTIVE

Slack workplaces can be accessed on multiple devices, including laptops, tablets, smartphones, and smartwatches [3].

SIMPLE FACTS ABOUT SLACK



HOURS PER WEEKDAY

that a member of an organization is plugged into Slack [4].



FORTUNE 100 COMPANIES

have paid Slack workspaces [5].



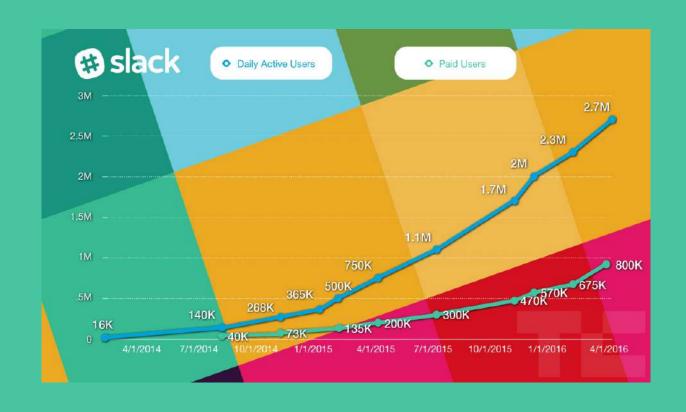
COUNTRIES WORLDWIDE

use Slack as its primary source of communication [5].

SLACK 3 YEARS AGO



[5]



STEADY INCREASE IN USERS OVER TIME [5]

- **DAILY ACTIVE USERS** = **2.7M** (2016)
- **DAILY PAID USERS** = **800K** (2016)

SLACK AS OF NOW

9



MILLION PEOPLE WORKING AS A TEAM ON SLACK 200



MILLION IN ANNUAL RECURRING REVENUE

50



THOUSAND COMAPNIES THAT USE SLACK

WHY PERFORM

... A HEURISTIC EVALUATION

The heuristic evaluation technique is an effective form of assessment because it's cheaper and faster than usability testing [7]. While usability testing requires outside participation, heuristic evaluation does not. Heuristic evaluation, as defined by Jakob Nielsen, is "a usability engineering method for finding the usability problems in a user interface design so that they can be attended to as part of an iterative design process." [8] When investigating in a user interface design, evaluators should ensure that the product is interactive (responds to human actions), supportive (integrates with human life), and essential (important part of our daily lives) [9]. Likewise, studying the usability of a product means to confirm that the product is easy to learn, effective to use, and enjoyable by the user [9].

This evaluation considered the affordances applied to every instance of the user's experience and recorded the advantages and disadvantages of those affordances. Based on the severity of an error (if there was one), each individual heuristic was given an overall score of either poor, average, or excellent. If the individual heuristic was given a poor or average score, solutions were offered to demonstrate how the system can improve.

NIELSEN'S TEN HEURISTICS

... FOR USER INTERFACE EVALUATION





DESIGN & LAYOUT IS SLACK'S EXPERTISE -

The following pages include the set of heuristics that Slack will be evaluated against. In this report, specific affordances on MPowered Entrepreneurship's Slack workplace will be assessed.



POOR

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

There is no information given to the user as to how to send the message in the input field. The plus sign, the at sign, and the smiley face are not icons for sending the message. In order to send the message, the enter key needs to be pressed, which is not told to the user.



Where is the send button? No information telling the user how to send a message once it has been typed

Solution: Add an UI element to the right-hand side of the message input to inform the user what the appropriate button is to send the message. For example, the word "send" can be placed to the left of the at sign to indicate to the user that the button send completes the desired action for the user.

MATCH BETWEEN SYSTEM AND THE REAL WORLD

AVERAGE

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real world conventions, making information appear in a natural and logical order.

The "Go" label when sending a direct message is not what the user would expect the label to be. It is meant to start a direct conversation with another person or group of people. This label can more confusion to the user because the user does not what to expect when the button is pressed.

Direct Messages	What does "go" mean? Use of "go" doesn't match the
friend	language user's perceived action

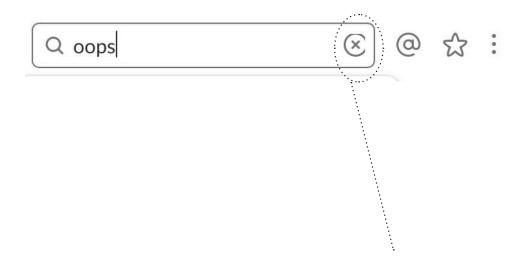
Solution: Change the name of the "Go" button label to describe what the button does. For example, a good label to improve the usability of the function would be "start conversation."



EXCELLENT

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

If a user makes a mistake when typing in the upper right-hand box of the workspace, there is a "x" button for the user to exit the function. It supports the idea of an undo button and causes no problem when leaving. Because there is a clear indication of how to leave the search without disturbing an interaction, the user control and freedom heuristic is passed.



Control and freedom to leave search!
Available button for undoing search



POOR

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

The Slack user interface (UI) uses the '+' icon to represent 4 different actions: to create a new group of multiple people, to open a direct message to one person, to add a file to a conversation, and to browse applications. Because the same icon represents 4 different actions on the interface, it will be confusing for a user to remember what the icon means each context.



All these '+' signs look the same but don't mean the same thing! Multiple use of the '+' sign for different functions

Solution: Use different icons to represent the different actions. If the same '+' label is kept, there should be clear directions next to the label to describe what the action entails.

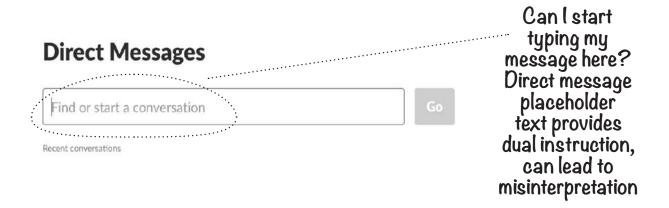
EVALUATION



AVERAGE

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

The placeholder text for the direct message states to either "find or start a conversation" for an action that searches for individuals to begin a conversation with. User might believe that they should write the message in this area because the action states to "start a conversation" but it does not align with the true purpose of finding who to direct message.



Solution: Delete the placeholder text "start a conversation" and add "an individual" to "find" to be aligned with the desired outcome. "Find an individual" eliminates the dual instruction and prevents the user from typing the message into the text box.

RECOGNITION RATHER THAN RECALL

AVERAGE

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

The button that allows the user to file archived files is hidden in Slack's UI. The user can find this button if the user scrolls down to the bottom of the right menu list. The user will not be able to send an archived file to a teammate if the user can't recall where this button is.



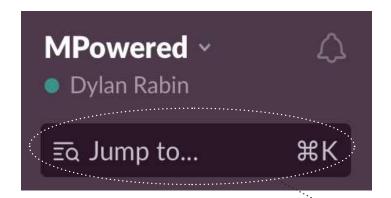
Solution: Truncate the file list so that option to open files archive is put into clear sight. By adopting this form of progression, the Slack workspace will give the perceived affordance of transferring files as it should.



EXCELLENT

Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

The user is granted the ability to move to any part of a conversation by typing in information and keywords in the top left of his or her workspace. The text box is located simple enough for experienced and unexperienced users to find and can cater to both types of users because of the available shortcuts within the affordance (such as control K). Because the workspace is flexible for many types of users, the efficiency of user heuristic is passed.



Good thing I can search for previous messages here!
Ability to jump to any part of a conversation



AVERAGE

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

The label for the button "Go" conflicts with the shortcut text below it "Return". The "Return" text competes with the "Go" label and adds more information than is needed.



Do I return somehwere if I press the "go" button? "Go" button label conflicts with keyboard shortcut text

Solution: Remove the "Return" text completely so that the "Go" button is the only relevant piece of information for the user. The primary call of action will be better understood if the "Return" text is deleted.



HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS

AVERAGE

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

There is no direction to the user if he/she mistypes a name in Direct Message box. If the user incorrectly types the name of the person he or she is trying to contact, the only item that pops up is that the search results had no matches. There is no information presented to the user for how to recover this error.

Direct Messages | Mat do l do now since l can't find the person l want to start a direct message with? No support for recovering from error in direct messaging

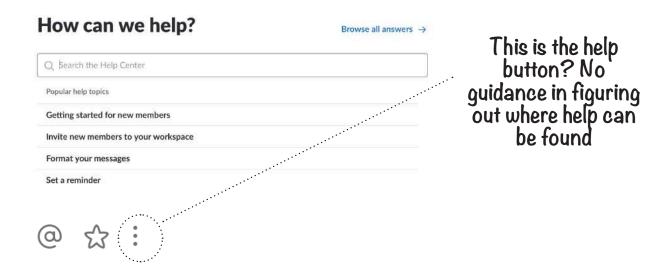
Solution: Provide reasons for the error below the no matches result. Have a bulleted list of reasons why the user cannot find the name of the intended receiver and possibly have suggestions for who the user was intending to start a message with.



POOR

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

There is no clear indication of where the help button is. In order for the user to find the help button, he or she must click on the third icon with the three dots in a vertical line. This causes a distraction and confusion for the user who is already trying to receive help for something else.



Solution: Add a fourth icon in the section with a question mark around a circle. This type of icon has been used for other sites as an affordance for help. By offering this icon to the user, the user will be able to receive help quickly.

OUTCOME

And where to go from here

#1	Visibility of system status	POOR
#2	Match between system and the real world	AVERAGE
#3	User control and freedom	EXCELLENT
#4	Consistency and standards	POOR
#5	Error prevention	AVERAGE
#6	Recognition rather than recall	AVERAGE
#7	Flexibility and efficiency of use	EXCELLENT
#8	Aesthetic and minimalist design	AVERAGE
#9	Help users recognize, diagnose, and recover from errors	AVERAGE
#10	Help and documentation	POOR

As Slack's user base continues to grow, more individuals and organizations will utilize Slack for their teams. Slack is different from its competitors because of conversational tone and playful affordances such as GIFs and chatbots. Simple fixes will put Slack in front of its competition and the user interface will be easy and engaging to navigate for all types of users. But in the meantime, the low and average rated heuristics need to be re-evaluted before organizations use Slack.

WHAT'S EFFICIENT ABOUT SLACK



CONTROL

Clearly marked emergency exits to leave



USER FREEDOM

Supports undo, redo, and various options the user wants



FLEXIBILITY OF USE

Tailored to novice and advanced users

WHAT'S NOT EFFICIENT ABOUT SLACK



SYSTEM STATUS VISIBILITY

User is not always aware of what is going on in the platform



CONSISTENCY AND STANDARDS

Different actions on the site look the same to the user



HELP AND DOCUMENTATION

Difficult to find help and documentation when needed

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THANK YOU

"Slack syncs seamlessly across devices, features a powerful internal search engine, and is highly compatible with dozens of other programs that keep businesses running."

Amanda Carr

New York Times Writer



