



Leveraging Technology in Refugee Resettlement

A study on co-sponsorship resettlement



WPI

Worcester Community
Project Center

Leveraging Technology in Refugee Resettlement:

A study on co-sponsorship resettlement

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WORCESTER POLYTECHNIC INSTITUTE

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WelcomeNST

This report represents the work of WPI undergraduate students submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the project's program at WPI, see

<http://www.wpi.edu/Academics/Projects>.

Abstract

WelcomeNST is a refugee resettlement organization using a private co-sponsorship model. Our project used technology to improve communication and information storage at WelcomeNST. We conducted interviews with Slack experts and NST members and observed WelcomeNST's Slack workspace. We found communication disconnects, decentralized knowledge and resources, and technology limitations. We investigated potential Slack add ons and improved the Slack workspace by implemented OneBar and Slackbot. OneBar utilizes AI for knowledge capture and Slackbot provides an automated welcome message to members. We developed training documents for WelcomeNST staff to use to improve use of OneBar and Slackbot over time. These Slack integrations will help close the knowledge gaps and improve user efficiency.

Executive Summary

WelcomeNST was founded in August of 2021; they are a co-sponsorship resettlement agency dedicated to resettling Afghan refugees. An NST, short for Neighborhood Support Team, aims to create 20 to 30 member teams that each help one refugee family in their transitional period. It is critical for these teams to be well connected, as well as have access to resettlement-related resources. Our project is centered on the idea of bringing the Slack application into the forefront of the NST program to further unify support teams, provide a platform for NST resources, and promote a comfortable transition for refugees and successful integration into a new society. The objectives of this project were to first understand technology use and knowledge gaps within NSTs, then gain knowledge about Slack, and then improve WelcomeNST's Slack infrastructure.

Through our research and communication with WelcomeNST, we have found: there exists a disconnect in communications, this disconnect leads to information deficits referred to as knowledge gaps, and that Slack and OneBar are effective tools for WelcomeNST.

Disconnect in communication

WelcomeNST has now made a transition to Slack, but email is still used to some extent, which poses a challenge for WelcomeNST. Our interviews have shown that NSTs use various tools for internal communication between members such as WhatsApp, IANACare, as well as email. Interviews with our sponsor indicated that there may not be a one-size-fits-all communications solution for all NSTs to use, and that trying to impose one might have drawbacks. Therefore, we needed to consider solutions that provided more centralization while also allowing the individual NSTs to use slightly different arrangements.

Knowledge Gaps

Due to the communication patterns of email chains, oftentimes knowledge acquired and shared within WelcomeNST would become nearly inaccessible. Our sponsor Elizabeth Davis-Edwards made it clear that although members of Neighborhood Support Teams acquired essential knowledge as they came into their roles, these members found it difficult to centralize this wealth of knowledge and make it accessible. Elizabeth noted that since communication had been carried out primarily via email, resources had often been lost in the chain. Centralizing communication along with resources required a platform that had these organizational abilities. This would allow knowledge gaps to be bridged, by enabling communication between teams and access to information and resources found by other teams.

Slack and OneBar

WelcomeNST needed tools that could promote effective communication as well as access to resources. Slackbot, Slack Connect, and OneBar were the tools that were focused on during this research. We found that Slackbot would be best suited as the bot that sends WelcomeNST users a welcome message with the basics of Slack. Additionally, Slack Connect was investigated as it is a tool that allows users to connect with others outside of their organization through Slack. WelcomeNST started a trial of Slack Connect on their workspace and found that there was not a need to invite individuals from outside organizations into their Slack server. This showed Slack connect was not relevant in the case of WelcomeNST's Slack workspace.

Then the tool OneBar was researched and found that it uses AI to scan channels and determine frequently asked questions as well as their answers so the OneBar bot could program itself to automatically respond to those questions in all Slack channels when they are asked. It is also capable of attaching links and documents in its responses. This tool would also ultimately need to be used as a paid version however, packages through OneBar are negotiable allowing WelcomeNST to implement it into their Slack workspace.

Major conclusions

WelcomeNST is committed to redefining the refugee resettlement process to promote a comfortable transition for refugees into a new society. To help them accomplish this, we strived to bring technology to the forefront of the program to facilitate communication and improve accessibility to their extensive online resources. When interviewing those involved in the program, it became evident that many would benefit from not only an application that would make it easier to communicate with other Neighborhood Support Teams but also an easily-accessible database with a variety of information. With the use of Slack and OneBar, WelcomeNST will be able to continue helping refugees in a more organized and connected way.

The findings from our research support the recommendations that we have formulated for WelcomeNST: to monitor and maintain the OneBar database, centralize important documents and files, and integrate other Slack add-ons. We believe this will be a sustainable solution as it is utilizing an AI system that will continuously learn how to assist. As the organization grows, more information can always be added to their collection of resources, and additional Slack add-ons can be integrated to further facilitate WelcomeNST's operations. It is our hope that our findings and recommendations are able to aid in the coordination of these refugee resettlement efforts and promote a more unified community of dedicated and admirable volunteers.

Acknowledgments

We wish to express gratitude towards our sponsor, Elizabeth Davis-Edwards, as well as to Barbara Petrocelli, who collaborated extensively with us to deploy improved technologies to WelcomeNST. Their feedback was invaluable and helped to shape the direction of our project.

We would like to thank the following people for meeting with us as their insight was essential to the progress of our project:

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Finally, we would like to thank our advisor, Laura Roberts, for her guidance throughout the course of our project, and WelcomeNST for inviting us to work on such an impactful project.

Authorship

The research required for this project was completed in a group setting, where all members shared their findings in a discussion-based format. This allowed for the large sections of our final report to be split up and assigned to individuals. When sections were completed, peer revisions, as well as advisor revisions, were implemented. This process continued until drafts were finalized, allowing all group members to develop a significant role in the authorship of this report.

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Introduction

The refugee crisis impacts people globally, and the Afghanistan refugee resettlement challenge impacts Worcester, Massachusetts, and the entire New England region. The withdrawal of United States troops from Afghanistan in August of 2021 prompted the Taliban offensive against the Islamic Republic of Afghanistan eventually resulting in its fall (Zucchini, 2021). Due to this conflict, tens of thousands of Afghan individuals and families have been forced to flee their country to seek out safety in other countries. The United States welcomed over 75,000 refugees alone (Nawaz, 2022), creating an urgent need for resettlement procedures and community support. Afghan refugees depend on effective resettlement models for success integrating into United States society.

The co-sponsorship resettlement model has been effective largely due to strong community engagement and support. Creating support teams within communities allows for a network of individuals to commit to assisting Afghan refugees through the preliminary stages of their resettlement. WelcomeNST, short for Neighborhood Support Team, aims to create 20 to 30 member teams that each help one refugee family in their transitional period. It is critical for these teams to be well connected, as well as have access to resettlement-related resources.

WelcomeNST is committed to redefining the refugee resettlement process as they work as the intermediate between the social service organization Ascentria Care Alliance and community members. Being part of an NST entails raising funds to help support living costs, assisting with finding proper housing, and tasks such as school enrollment, transportation, shopping, and job applications. Each is assigned a case manager from Ascentria Care Alliance; however, all responsibilities for various types of support and fundraising must be delegated

through the team. These responsibilities include but are not limited to: Co-leaders, fundraising coordinators, housing committees, welcome point persons, cultural mentors, etc. With these various tasks split amongst multiple groups and families, these teams must maintain connection and organization to provide the strongest support to refugee families. To promote Afghan refugee integration success, WelcomeNST has introduced the use of Slack, a communication platform, to contribute to the success of the NST model.

Our project is centered on the idea of bringing the Slack application into the forefront of the NST program to further unify support teams, provide a platform for NST resources, and promote a comfortable transition for refugees and successful integration into a new society. The objectives of this project were to first understand technology use and knowledge gaps within NSTs, then gain knowledge about Slack, and then improve WelcomeNST's Slack infrastructure.



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Background

Worldwide Refugee Crises

Recently, high volumes of forced migration have led to a worldwide refugee crisis. According to the United Nations Refugee Agency, the number of refugees worldwide, excluding Palestinian refugees, has risen from a low of 8.7 million in 2005 to 26.6 million in mid-2021, an increase of over 205 percent (UNHCR, 2021). 68 percent of refugees originate in just five countries: Syria, Venezuela, South Sudan, Myanmar, as well as our country of interest, Afghanistan (UNHCR, 2021). The crises in these five countries are primarily caused by outbreaks of political violence within the last decade. A large number of refugees is a significant humanitarian issue. Refugees primarily reside in countries neighboring their country of origin, and most reside in developing countries (UNHCR, 2021). Refugee camps often provide food, water, sanitation, and housing which is inadequate (*Food, Water, Sanitation, and Housing in Refugee Camps*).

In developed countries, the crisis is a contentious political issue. In Europe, far-right parties like Germany's AfD and France's National Rally have seized on the crisis. While countries like Germany and Sweden have accepted large numbers of refugees, in the hundreds of thousands, this is not true across Europe more broadly: this has been a pressing issue for the European Union (Davis, L., & Deole, S. S.). In the United States, refugees and immigration more generally have become more politicized, with Donald Trump's 2016 campaign promise to "build a wall" being a major turning point. In 2021, refugees and immigration are still hot-button issues, which poses challenges for our project (*The U.S. Immigration Debate, 2021*).

State of Affairs in Afghanistan

The fall of Kabul to the Taliban in August 2021 has created a new wave of Afghan refugees. Afghanistan has been roiled by conflict since the Soviet occupation in the 1980s, which culminated in the Taliban seizing power in 1996 after a bloody civil war. The Taliban, a fundamentalist Islamist terror group, has throughout its history engaged in numerous violations of basic human rights, such as extra-judicial executions and banning education for women and girls. The Taliban continued to harbor Al Qaeda after they carried out the attacks of September 11th, 2001, prompting the United States to quickly topple the Taliban government. The new U.S.-backed government brought about improvements such as vastly improved women's rights and press freedoms. However, rampant corruption and the continuing conflict with Taliban remnants strained the U.S.-backed government. Ahead of the planned U.S. withdrawal in August 2021, the Taliban escalated its efforts to retake the country. In August 2021, the United States withdrew and the Afghan capital city of Kabul fell rapidly to the Taliban, marking the end of the pro-Western government and causing tens of thousands of refugees to flee the Taliban (Zucchini, 2021). As our project is located in the United States, we will examine the U.S. refugee admission process specifically.

United States Refugee Admission Programs

Since World War II, the U.S. has accepted refugees from various countries. The relationship between the federal government and private resettlement agencies was relatively ad-hoc until the Refugee Act of 1980 streamlined the process, creating the current system. The total cap on refugees has been trending down since the Refugee Act introduced the cap in 1980, falling from 231,700 in 1980 to 90,000 in 2000 and 18,000 in 2020 (Migration Policy Institute,

2021). Presidents Ronald Reagan (1981-1989), Bill Clinton (1993-2001), and Donald Trump (2017-2021) have all presided over substantial drops in the refugee cap (Migration Policy Institute, 2021). The Biden administration raised the 2021 cap to 62,500 in May 2021, but only 11,411 refugees were admitted in the fiscal year 2021, far below the cap. This is the lowest count since the 1980 Refugee Act (Washington Post, 2021).

After the collapse of Afghanistan’s government, over 60,000 Afghans have been admitted to the United States (WelcomeNST). This is on par with the over 97,000 Afghan refugees admitted to the United States since the beginning of the U.S. war in Afghanistan in 2001 through August 2021 (Waddell, 2021). This marked increase has led to the new refugees being put on “parole,” a kind of humanitarian relief which, while similar, is not official refugee status (Narea, 2021). This humanitarian parole is temporary, only lasting for two years. Under Operation Allies Welcome, the Department of Homeland Security is leading and directing the federal resettlement effort. Over 40% of Afghans admitted are eligible for a Special Immigrant Visa (SIV) because they took significant risks to assist the United States in Afghanistan, or they are related to someone who did (Operation Allies Welcome, 2021). Afghans who complete the SIV process and their dependents are admitted as permanent residents, while others can pursue either SIV or another immigration status from U.S. Citizenship and Immigration Services (Operation Allies Welcome, 2021).



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Community Attitude Towards Refugees

Many refugee programs depend on the support of the local community to help in the resettlement process for refugees, however, the prevalence of xenophobic and racist attitudes towards refugees can make it difficult to gather the support that is needed. A 2017 study showed that people are consistently less supportive of resettlement within their communities than resettlement elsewhere in the country, and many people are also easily influenced by media that portray immigrants and refugees in threatening frames (Ferwerda & Horiuchi, 2017). This results in significantly reduced support for both national and local resettlement. These factors that shape public support for resettlement programs can be summarized in two categories: not-in-my-backyard-syndrome (NIMBYism) and media framing.

While common humanitarian values may lead many citizens to support refugee resettlement in principle, NIMBYism occurs when they then begin to oppose developments within their vicinity. Though refugee policies are national in scope, their immediate impact is primarily local, causing citizens to be less comfortable with the possibility of hosting refugees in their communities. The hesitation or unwillingness to accept refugees can be accredited to several deep-seated factors such as racism and xenophobia. There is often confusion over the misguided connection between refugees and violence, and these perspectives are regularly heightened by biased media representation. News stories have been found to have a more powerful effect on weakening overall support for resettlement than positive ones had in improving it (Ferwerda & Horiuchi, 2017).

This unfortunate reality does possess a silver lining, however: proximity to settled refugees may mitigate the effects of negative media coverage, and citizens in refugee-dense areas

were less likely to perceive refugees as a threat (Ferwerda & Horiuchi, 2017). This study on NIMBYism had 2295 participants with each having answered a survey consisting of political and geographic questions. The participants were then split into two groups; one was presented with a threatening media frame relating to refugees/foreigners, and the other was presented with a counter-threatening frame. Although the threatening frames were shown to reduce support for resettlement among people from low refugee density counties, these same frames showed no detectable effects on the attitudes of participants within high refugee density counties. Furthermore, those in high refugee density communities were found to be more supportive of expanding local refugee resettlement, whereas those who lived in the lower refugee density communities were more opposed (Ferwerda & Horiuchi, 2017).

Despite the difficulties, several programs on both the national and local levels have been able to gather much of the support that is required from communities to successfully resettle refugee families.

Co-Sponsorship Agencies

Local refugee resettlement programs such as Ascentria Care Alliance in Worcester, Massachusetts offer several community-based programs that aim to help individuals and families achieve independence and stability. Many nonprofit agencies receive funding to provide services such as health care, English language training, employment counseling, schooling integration, and elder services. The Integrated Refugee and Immigrant Services (IRIS) non-profit agency in New Haven, Connecticut believes in empowering refugees and immigrants to become self-sufficient, and that these newcomers enrich our communities. IRIS is a great example of a refugee resettlement program that effectively welcomes persecuted people from Afghanistan and

other countries into American communities, providing lifesaving support during their difficult transition.

Studies have shown that resettlement agencies that utilize the community integration model can help create a strong volunteer and intern network, connect people through community gardens, form relationships between the refugee community, leaders and landlords, and aid in refugee health care and permanency (Burrows & Ramic, 2017). These programs are often in need of volunteers that can help in a variety of ways, including raising money to gather goods for the refugees, becoming a host for a refugee family, and even donating their talents. People with specialized skills or resources (such as knowing more than one language) are in high demand and can greatly help the resettlement process (Lieber, 2017). Even those who are unable to volunteer or become involved to this degree can still help local resettlement agencies by being an advocate for them. By spreading the word for help in these organizations and dispelling any ill feelings towards refugees, the average citizen can greatly help these local programs.

Community-based models are extremely reliant on the ability of an organization to reach out to people to get them involved, and one of the most effective forms of community outreach is through the use of technology.

WelcomeNST

WelcomeNST was founded in August of 2021; they are a co-sponsorship resettlement agency dedicated to resettling Afghan refugees. WelcomeNST is diligently working towards improving community outreach and incorporating technology

to improve the resettlement process for Afghan refugees. WelcomeNST has around 53 NSTs actively helping with the resettlement of Afghan refugees. Each NST consists of about 4-5



different families resulting in approximately one thousand volunteers currently enrolled in the NST programs. With the help of so many people, WelcomeNST has been able to resettle hundreds of Afghan refugees. Most recently WelcomeNST changed their name from WelcomeMA to reflect their recent developments beyond Massachusetts. WelcomeNST uses spreadsheets, private Facebook groups, email groups, and Slack to run its NST model. These technologies are used to organize and keep the support teams in contact with each other as well as communicate with other teams and team leads. Community outreach is being handled through the Facebook and Slack groups. WelcomeNST is looking to improve community outreach by investing more into Slack and connecting their NSTs better. The goal of this project is to help WelcomeNST leverage Slack to bridge the knowledge gaps within their community to make helpful information easier to find and increase the efficiency of the resettlement process.

In summary, our background research gives an overview of the topics relevant to the influx of Afghan refugees into the United States, their subsequent resettlement process, and how technology can be utilized to benefit Neighborhood support teams.



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Methodology

Our plan to help WelcomeNST effectively implement technology

Our project is centered on the idea of bringing the Slack application into the forefront of the NST program to further unify support teams, provide a platform for NST resources, and promote a comfortable transition for refugees and successful integration into a new society. The objectives of this project were to first understand technology use and knowledge gaps within NSTs, then gain knowledge about Slack, and then improve WelcomeNST's Slack infrastructure.

1. Understand technology use and knowledge gaps within NSTs

To help WelcomeNST utilize technology effectively, we learned about WelcomeNST's progress implementing technology so far, as well as the "knowledge gaps" that exist within NSTs. We assessed how improved technology use could fit into WelcomeNST's operating model and mission, and identified knowledge gaps within NSTs: areas where improved communication, utilizing technology, could contribute to NST members' ability to perform their roles.

To begin, we gathered information on WelcomeNST's technology use through interviews. We also met to understand what WelcomeNST needs from Slack, possible improvements to their Slack server, as well as the experiences of individual NSTs. Through these interviews, we identified several "knowledge gaps," which pose a problem for NSTs because they involve logistically challenging problems. Many times these problems have been solved

before by other NSTs. We worked to improve communication at WelcomeNST, using Slack, so that the solutions to these problems could be widely shared on WelcomeNST's Slack server.

2. Gain knowledge about Slack

In order to establish how Slack can be best utilized by WelcomeNST, we first had to research the platform and its capabilities. To begin understanding Slack's abilities we started by interviewing professionals with experience in organizing large groups of people on Slack. From these interviews, we gained advice as to how to clearly label and organize Slack channels, how to sort newcomers, and how to program Slackbot. We were then able to compare recommendations to the existing WelcomeNST Slack to see where helpful changes could be made such as the implementation of the Slackbot. In addition to this, research was done to look into differences in the free and paid versions of the platform to see what tools could be utilized while still using a free version of Slack.

Additionally, we wanted to implement a tool that would allow for effective information sharing as well as easy access to frequently asked questions and answered. The platform OneBar.io was implemented as a two-week free trial to see if its artificial intelligence capabilities would benefit WelcomeNST's Slack space. OneBar is capable of scanning Slack channels to find questions that have been asked and what their answers were in order to program a bot to automatically respond to those questions in the future. This tool allows for the immediate retrieval of stored resources and information which helped as WelcomeNST began to explore its capabilities on their Slack channel.

3. Improve WelcomeNST's Slack/technology infrastructure

With a fundamental understanding of how WelcomeNST currently functions and utilizes technology, we were then able to apply what we learned from our research to begin improving upon the organization's use of Slack. Our main focus was to build upon the progress that had already been made on integrating Slack into WelcomeNST's operations. To do this, we periodically implemented changes to the Slack workspace and created a channel titled "Slack Feedback" for users to voice their opinions of said changes or where they feel there is a need for improvement.

The modifications included improved new-member instructions, programming the SlackBot application, and connecting second-party programs such as google drive. In order to avoid confusion for a first-time Slack user entering WelcomeNST's Slack workspace, we created step-by-step instructions that will be sent to them immediately after joining. These instructions clearly explain how to join their team's channel, send messages, explore other channels, and efficiently search for documents or topics in these channels. We programmed the Slackbot to automatically answer a variety of questions that users may ask, as well as to provide links to any helpful resources that may be applicable. In addition to Google add ons, we implemented OneBar. This is a smart bot for Slack teams that helped bridge the gaps in knowledge among the NSTs. We also created a short "How to" guide for the WelcomeNST slack users to get them acclimated to this program.

By constantly analyzing the feedback provided by the Slack users, we were able to actively improve the program so that it could be utilized as an efficient and versatile aid to WelcomeNST's refugee resettlement efforts. In the next chapter we will discuss our findings from working with WelcomeNST and researching Slack.

Findings

Our project with WelcomeNST centered on utilizing technology to help WelcomeNST more effectively carry out their mission of resettling Afghan refugees in New England. Through our research and our continuous communication with WelcomeNST, we have arrived at a set of findings: that there exists a disconnect in communications, that this disconnect leads to knowledge gaps (information deficits which could be resolved with improved communication), and that Slack and OneBar are effective tools for WelcomeNST.

Disconnect in Communications

WelcomeNST was previously entirely dependent on email for communication between individual NSTs and between NSTs and the leadership of WelcomeNST. WelcomeNST has now made a transition to Slack, but email is still used to some extent, which poses a challenge for WelcomeNST. In addition, our interviews have shown that NSTs use various tools for internal communication between members of the same NST. These tools include Slack, WhatsApp, IANACare, as well as email. While WelcomeNST is currently using Slack, the individual NSTs have their internal communications on many platforms, which makes information transfer more difficult, and contributes to the “knowledge gap” problem. Interviews with our sponsor indicated that there may not be a one-size-fits-all communications solution for all individual NSTs to use, and that trying to impose one might have significant drawbacks. Therefore, we needed to consider solutions that provided more centralization while also allowing the individual NSTs to use slightly different arrangements.

Knowledge Gaps

Due to the communication patterns of email chains, oftentimes knowledge acquired and shared within WelcomeNST would become nearly inaccessible. Our sponsor Elizabeth Davis-Edwards made it clear that although members of Neighborhood Support Teams acquired essential knowledge as they learned the ropes of their roles, these members found it difficult to centralize this wealth of knowledge and make it easily accessible. Both Elizabeth and her Director of Marketing, Barbara Petrocelli, made note that since communication had been carried out primarily via email, many resources had been easily lost in the chain. Tackling the issue of centralizing communication along with resources required the utilization of a platform that had these organizational abilities. This would allow knowledge gaps to be bridged, by enabling communication between different teams and access to information and resources found by other teams to eliminate the issue of inaccessible resources.

Slack and OneBar

WelcomeNST concluded that the platform Slack would be the most appropriate method of communication and resource sharing for their company. We wanted to implement a tool that would be able to detect common questions and automatically respond with previous responses as well as be able to pin and centralize resources that had been shared. From there it was investigated how the paid Pro version of Slack compares to the free version. It was clear that as WelcomeNST continued to grow they would soon surpass the free version's limit of 10,000 messages saved and five gigabytes of file storage. It is also important to note that the free version of Slack allows for a limit of 10 apps to be integrated into the workspace, which would place a

cap on the number of tools that could be utilized. This made it clear that when appropriate, WelcomeNST would upgrade to the paid version of Slack where these restrictions do not apply.

WelcomeNST needed tools that could promote effective communication as well as access to resources. Slackbot, Slack Connect, and OneBar were the tools that were focused on during this research. The Slackbot tool that comes with Slack is easy to program but it does not automatically detect common questions and responses. We found that Slackbot would be best suited as the bot that greets new WelcomeNST users with a programmed message and directs them on the basics of Slack. Additionally, Slack Connect was investigated and found that it is a tool that allows users to connect with others outside of their organization through Slack. WelcomeNST started a trial of Slack Connect on their workspace and found that there was not a need to invite individuals from outside organizations into their Slack server. While this may be useful to businesses looking to invite collaborators to an internal Slack, it was not relevant in the case of WelcomeNST's Slack workspace.

Then the tool OneBar was researched and found that it uses AI to scan channels and determine frequently asked questions as well as their answers so the OneBar bot could program itself to automatically respond to those questions in all Slack channels when they are asked. It is also capable of attaching links and documents in its responses. This tool would also ultimately need to be used as a paid version however, packages through OneBar are negotiable allowing WelcomeNST to implement it into their Slack workspace.

Feature	Slackbot	Slack Connect	OneBar
AI Learning	✓	✗	✓
Programmable	Partially	✗	✓
Cost	Free	Varies	Varies
Document Sharing	✗	✗	✓

Table 1: Comparison matrix of the capabilities of various Slack add-ons.

Recommendations

The goal for this project was to leverage technology in refugee resettlement, within the co-sponsorship organization WelcomeNST. We accomplished our goal by conducting interviews with Slack super users and members of the WelcomeNST team. The information we gathered from these interviews allowed us to put forth recommendations that can be implemented into WelcomeNST's technology resources. These recommendations can help WelcomeNST keep up with their fast growth as a non-profit co-sponsorship.

1. We recommend monitoring and maintaining the OneBar database

We recommend that WelcomeNST continue to keep track of and update the knowledge base within OneBar's system. As WelcomeNST continues to use OneBar the AI will automatically learn and adapt to what is being posted in Slack channels. To an extent, the AI will maintain and update the knowledge base and link certain topics together to make the data easily accessible for all users. For example, when a question is asked the OneBar bot in Slack will answer the users' questions and then offer answers from related questions. The WelcomeNST staff would need to routinely check in with the OneBar knowledge base to manually input any recurring questions that they've noticed not being answered by the OneBar bot. Secondly, WelcomeNST could create topic tags and



assign the tags to questions to help the AI learn what topics go together and allow for better suggestions when answering users. We provided a OneBar guide on how to use OneBar and navigate their user interface. This guide gives a clear explanation of how to implement the above recommendations.

2. We recommend centralizing important documents and files

Having all important documents and files in one easy-to-access place would make bridging knowledge gaps much more efficient. In conjunction with the previously mentioned add-on, Google Drive can be linked to Slack. We recommend that Google Drive be integrated into Slack as it would allow for documents, folders, google sheets, and google slides to be shared right through Slack messages. It would also allow the OneBar AI to answer questions with a link to the document the user is looking for, therefore bridging the knowledge gaps and improving the OneBar knowledge base. This would go hand in hand with recommendation one as designating certain files to certain topic tags can be manually added within OneBar to aid in the filling of the knowledge base. We went through step by step how to do this with Barbara Petrocelli, the Director of Marketing and Slack lead at WelcomeNST, as she will be the main admin for all managerial OneBar tasks. It is also explained in our OneBar guide how to search using the OneBar AI and how to save a thread to OneBar right from Slack.



3. We recommend improving the “Welcome Pack” message to new members

WelcomeNST is a large organization with over a thousand volunteers so there is a large amount of knowledge that is shared and a need to make it easily accessible. As we have already programmed the SlackBot to send a welcome message to any new users that join the WelcomeNST Slack there is still room for improvement.

To improve the welcome message we recommend that within the message a link is included for the users' convenience. This link would lead users to a folder where the new user can have access to all of the important files needed to begin their journey as an NST member. In conjunction with the link, we feel that creating a short explanation of the Slack channels available to them would serve as a good segway into their new Slack workspace. Any additional Slack-related questions could be addressed in the “help-with-slack” channel that we helped to set up.



Conclusion

WelcomeNST is committed to redefining the refugee resettlement process to promote a comfortable transition for refugees into a new society. Our project was centered around the idea of bringing technology to the forefront of the program to facilitate communication and improve accessibility to their extensive online resources. When interviewing those involved in the program, it became evident that many would benefit from not only an application that would make it easier to communicate with other Neighborhood Support Teams but also an easily-accessible database with a variety of information. With the use of Slackbot and OneBar, WelcomeNST will be able to continue helping refugees in a more organized and connected way.

The findings we have presented from our research support the recommendations that we have formulated for WelcomeNST: to monitor and maintain the OneBar database, centralize important documents and files, and integrate other Slack add-ons. By integrating OneBar with Slack, we were able to help WelcomeNST develop their Slack workspace so that members can ask questions and receive an instant reply of relevant information, as well as have the ability to easily contact others in the program that may be able to help. We believe this will be a sustainable solution as it is utilizing an AI system that will continuously learn how to assist. As the organization grows, more information can always be added to their collection of resources, and additional Slack add-ons can be integrated to further facilitate WelcomeNST's operations. We hope that our findings and recommendations can aid in the coordination of these refugee resettlement efforts and promote a more unified community of dedicated and admirable volunteers.

References

Burrows, N. & Ramic, J. (2017). Defining the community integration model of refugee resettlement: engaging the community in select refugee resettlement. *Social Innovations Journal*, 38(1).

Davis, L., & Deole, S. S. (n.d.). *Immigration and the Rise of Far-Right Parties in Europe*. 3.

Food, Water, Sanitation, and Housing in Refugee Camps. (n.d.). Retrieved January 28, 2022, from <http://www.uniteforsight.org/refugee-health/module3>

Ferwerda, J., Flynn, D., & Horiuchi, Y. (2017). Explaining opposition to refugee resettlement: The role of NIMBYism and perceived threats. *Science Advances*, 3(9).
<https://www.science.org/doi/10.1126/sciadv.1700812>

Lieber, R. (2017, February 17). How you can help refugees in the United States. *The New York Times*. Retrieved from
<https://www.nytimes.com/interactive/2017/your-money/how-to-help-refugees-in-us.html>

(Migration Policy Center) U.S. Annual Refugee Resettlement Ceilings and Number of Refugees Admitted, 1980-Present. (2013, August 13). Migrationpolicy.Org.
<https://www.migrationpolicy.org/programs/data-hub/charts/us-annual-refugee-resettlement-ceilings-and-number-refugees-admitted-united>

Operation Allies Welcome. (2021, August 26). Department of Homeland Security.
<https://www.dhs.gov/allieswelcome>

Narea, N. (2021, November 17). *Why Biden is struggling to revive the US refugee program.*

Vox. <https://www.vox.com/policy-and-politics/22777209/immigration-refugee-cap-biden-afghan-resettlement>

Nawaz, A. N., & Joseph, E. J. (2022, January 1). *Many Afghan refugees remain in legal limbo in the U.S.* PBS NewsHour. Retrieved January 25, 2022, from

<https://www.pbs.org/newshour/show/many-afghan-refugees-including-unaccompanied-minors-remain-in-legal-limbo-in-the-u-s-2>

Refugees, U. N. H. C. for. (n.d.). *Figures at a Glance.* UNHCR. Retrieved November 15, 2021,

from <https://www.unhcr.org/figures-at-a-glance.html>

The U.S. Immigration Debate. (n.d.). Council on Foreign Relations. Retrieved January 28, 2022,

from <https://www.cfr.org/backgrounders/us-immigration-debate-0>

(Waddell, 2021) *States That Have Welcomed the Most Refugees From Afghanistan.* (2021

September 14). US News & World Report. Retrieved November 21, 2021, from

<https://www.usnews.com/news/best-states/articles/2021-09-14/afghan-refugee-resettlement-by-state>

(Washington Post, 2021) *Analysis | Biden has resettled the fewest refugees in the history of the*

U.S. program. What could change that? (2021, November 2). *Washington Post.* Retrieved

November 21, 2021, from [https://www.washingtonpost.com/politics/2021/11/02/biden-](https://www.washingtonpost.com/politics/2021/11/02/biden-has-resettled-fewest-refugees-history-us-program-what-could-change-that/)

[has-resettled-fewest-refugees-history-us-program-what-could-change-that/](https://www.washingtonpost.com/politics/2021/11/02/biden-has-resettled-fewest-refugees-history-us-program-what-could-change-that/)

(WelcomeNST) *Home*. (n.d.). Retrieved January 28, 2022, from <https://www.welcomenst.us/>

Zucchini, D. (2021, October 7). The U.S. War in Afghanistan: How It Started, and How It Ended. *The New York Times*. <https://www.nytimes.com/article/afghanistan-war-us.html>