TEXAS HIGHER EDUCATION COORDINATING BOARD

Request for Offers (RFO)
ADVi Chatbot

RFO No. 781-3-29358

Questions and Answers
July 24th, 2023

1. On page 2, it states, "Respondents must demonstrate their knowledge and expertise of the environment (e.g., platforms, software, applications, security, network, tools, etc.) for which work is to be performed." We haven't been able to find reference in the document as to what platform or tools have been used to create ADVi to-date. Can you tell us what technologies THECB has used or is intending to use for the creation of ADVi?

    RESPONSE: The current technology is our current vendor's proprietary cloud-based application.

2. Whether companies from Outside USA can apply for this? (like,from India or Canada)

    RESPONSE: Respondents should be located within the continental United States.

3. Whether we need to come over there for meetings?

    RESPONSE: THECB operates as a hybrid organization. The selected vendor should facilitate the most efficient meeting schedule and environment.

4. Can we perform the tasks (related to RFP) outside USA? (like, from India or Canada)

    RESPONSE: No. All contract services must be performed in the continental United States.

5. Can we submit the proposals via email?

    RESPONSE: Proposals must be submitted via email. Please see Section 10.2 of the RFO.

6. Could you provide more details about the expected level of complexity in the chatbot's interactions? For example, should the chatbot be able to handle multi-turn conversations, or is it primarily for answering simple, direct questions?

RESPONSE: THECB seeks a vendor to deliver a complex chatbot that can respond to multi-turn conversations. ADVi's current technology solution can provide two-way communication with the ability to be both reactive (responding to students who reach out with questions) and proactive (nudging student regularly to provide support, reminders, and resources via text message). Additionally, ADVi is supported by a team of trained virtual advisors, provided by THECB, who provide extra support when the chatbot is not able to respond with accuracy.

7. Could you provide technical details about the Apply Texas and My Texas Future platforms that the chatbot will be integrated with?

RESPONSE: Apply Texas and My Texas Future are both built on the THECB Azure architecture and leverages Salesforce. The THECB Azure architecture will be provided during the discovery phase of the project.

8. Could you specify the metrics you are interested in for the monthly and yearly reports of student contacts and engagement?

RESPONSE: Monthly and yearly reports of student contacts as well as student engagement reports. (Details of the reports to be agreed upon at a later date.) Administrative access to program reports should include aggregate and individual user data.

9. We typically provide both onsite and offshore support, with options for email support and live support through phone/human agents. Could you provide more details about your preferences or requirements for support? For instance, Would you prefer email support, live phone support, or a combination of both? Additionally, could you provide more details about your expectations for response times for issues and maintenance schedules?

RESPONSE: The THECB expects that the proposed solution is available to users 24/7. The vendor is responsible for ensuring the solution has a 99% operational rate. THECB prefers a vendor who can provide a dedicated partnership team.

10. Do you expect the vendor to provide training for your staff on how to use the administrative portal and handle escalations from the chatbot?

RESPONSE: Yes, THECB expects the vendor to provide training on the administrative portal and be a thought partner in best practices on how to handle escalations from the chatbot.

11. Could you provide more details about the features and capabilities you expect from the administrative portal?

RESPONSE: The administrative portal is for our internal ADVi advisors to manage escalations and for reporting. The administrative portal should provide ease of communication from the chatbot to the ADVi advisors. In addition, the administrative portal should provide real-time reporting capabilities around agreed upon metrics.

12. Who is responsible for creating and managing the chatbot's knowledge base? How frequently do you anticipate the knowledge base will change, and how quickly do you expect updates to be reflected in the chatbot's responses?

RESPONSE: The vendor is responsible for creating and managing the chatbot's knowledge base. The knowledge base should be updated in real time when source material is updated.

13. Should the chatbot be publicly available, or only accessible to registered/authenticated students?

RESPONSE: The chatbot should be available to any users who subscribe and agree to the terms of service. The webbot on Apply Texas and My Texas Future should be available publicly.

14. Apart from acting as a Q&A agent, what level of intelligence or specific AI capabilities do you expect the chatbot to have?

RESPONSE: ADVi currently can provide two-way communication with the ability to be both reactive (responding to students who reach out with questions) and proactive (nudging student regularly to provide support, reminders, and resources via text message). We expect the chatbot to leverage LLM to have the most up-to-date source information around postsecondary planning including but not limited to: returning adult learners, transfer processes, financial aid, scholarships, and the full high school life cycle.

15. Could you provide more details about the extent of self-service you expect students to be able to perform through the chatbot?

RESPONSE: Subscribers should be able to get answers to postsecondary and career planning questions through reliable source information or have their messages escalated to the ADVi advising team.

16. Mention is made to "continue" the development. Can we have some context as to what has been done so far. We are particularly interested in the high level approach. I.e. dialog flow vs generative AI model, software module in existing tools vs. standalone, datasets that are available/used. Spec say there is interest in using LLMs. Has this been the course so far?

    RESPONSE: The current technology is our current vendor's proprietary cloud-based application. To date, ADVi has not employed LLM.

17. The RFP states "knowledge base and campaign library that is constantly growing", can we have more information on this?

    RESPONSE: We expect the chatbot to have the most up-to-date source information around post-secondary planning including but not limited to: returning adult learners, transfer processes, financial aid, scholarships, and the full high school life cycle.

18. To clarify, the intro mentions "ADVi learns with every interaction". Can we have more details as to what the expectation is here. I.e. is there a need for online-learning, meaning the bot learns with every sample it receives, continuously, or that is just has a measure of personalization?

    RESPONSE: Through the use of generative AI, we expect the ADVi chatbot to continuously improve as well as provide personalized information.

19. The intro mentions: "ADVi is supported by a team of trained virtual advisors". Can we have some clarity as to what this means. Is this trained staff that are available online for advice? To these mentors go through any learning material? If so, will this be available?

    RESPONSE: THECB ADVi advisors are available Monday through Friday 8:00am to 5:00pm CT to respond to escalations. These are trained professional advisors who complete initial and ongoing professional learning. THECB can make the training manuals available during the discovery phase.

20. Communication via text. Is there already a text relay service? Or we do need to propose one?

    RESPONSE: The current service is our current vendor's proprietary cloud-based application. Vendors should propose a full-service solution.

21. The RFP mentions: "Ensure that the proposed technical solution incorporates responsible generative AI practices through the development, testing, deployment, and maintenance of the chatbot." How will this be evaluated?

RESPONSE:

- o *Valid and Reliable:* Ensure that the intended use of the chatbot is fulfilled and its outputs are reliable;
- o *Bias Mitigation:* Take measures to identify and manage or mitigate bias in the chatbot's training data and algorithms, including providing THECB with the workflow and decision-making processes of any algorithms utilized;
- o *Transparency:* The chatbot shall be transparent in its operations, ensure that THECB and the user understand how the chatbot works, including which data sets are consulted to make decisions. The chatbot shall clearly communicate the limitations of its capabilities, and the user shall know when they are communicating with a chatbot and not a human;
- o *Accountability:* Take responsibility for the actions of the chatbot, ensuring it adheres to ethical and legal standards and does not harm the user or society in any way;
- o *Secure and Resilient:* Ensure the chatbot can withstand unexpected adverse events or changes to use and can maintain functionality and ensure the safety and security of data; and
- o *Continuous Monitoring and Improvement:* Monitor the chatbot's performance continuously and make improvements where necessary to ensure that it operates ethically and responsibly.

22. The spec mentions: "Continuous Monitoring and Improvement". Is there already something like this in place? Or do we recommend/propose a solution?

RESPONSE: Vendors should propose a full-service solution.

23. In this section in the RFP; " Provide THECB with full access to a client approved administrative platform (plug in and/or app) to manage and monitor responses and run segmented campaigns based on different needs of functional areas (Any additional fees for these tools should be included in Respondent's proposed pricing); " it mentions a client approved administrative platform. Can you elaborate? Is this something that exists? Or do we have to propose for this?

RESPONSE: Vendors should propose a full-service solution.

24. Mention is made to Azure. Is the proposal limited to Microsoft as a cloud provider?

RESPONSE: ADVi is currently operated and maintained outside the THECB architecture by our current vendor's proprietary cloud-based application. This proposal does not limit Microsoft as a cloud provider.

25. RFP mentions: "Provide content architecture and a comprehensive LLM knowledge base appropriate to each target learner audience that is grounded in both THECB, Texas specific, and national conversation understandings;". Is this knowledge-base expected to come from the vendor? Or will the THECB provide? Please elaborate.

RESPONSE: THECB can provide the selected vendor with the current knowledge base. It is the expectation that the vendor provide a solution that leverages generative AI, that enables the ADVi chatbot to continuously improve as well as provide personalized information through conversational understanding.

26. Is this a re-compete RFP? If yes,

RESPONSE: There is a current vendor for these services; however, Texas law requires the services to be competitively procured at the expiration of the contract term.

27. Could you please share the name of Current Suppliers (who are currently providing services to Agency)?

RESPONSE: Mainstay is the current vendor for these services.

28. Could you please share current Supplier's pricing and Proposals?

RESPONSE: All publicly available contract information for the current vendor can be found on the LBB Contracts Database.

29. When the existing contract was started, and what is the annual monetary spent value of the current contract since inception?

RESPONSE: All publicly available contract information for the current vendor can be found on the LBB Contracts Database.

30. How many resources are currently engaged in the current contract?

RESPONSE: THECB contracts with a single vendor under the current contract.

31. Can you please share the amount of business each vendor did under this contract in previous years?

RESPONSE: All publicly available contract information for the current vendor   can be found on the LBB Contracts Database.

32. Is there any local preference for this contract?

    RESPONSE: The preferences that THECB must comply with are established by statute. Please see Attachment A (4) for a list of preferences.

33. What will be the estimated annual budget for this project?

    RESPONSE: This is a competitive solicitation, and we are unable to provide budget information.

34. Would you be accepting references from public as well as commercial entities?

    RESPONSE: Yes.

35. Is sub-contracting required for this contract?

    RESPONSE: No.

36. How many vendors agency is planning to select?

    RESPONSE: THECB seeks one or more vendors to fulfill this solicitation.

37. Do you have a range of the number of intended users for this chatbot?

    RESPONSE: For the graduating class of 2022, nearly 240,000 high school seniors were contacted. Of that population, over 151,000 users (64% of the population) were actively engaged, meaning they sent at least one text messages to the ADVi chatbot during the annual cycle. Over that same period, ADVi sent this audience over 28,000,000 messages. With this solicitation, THECB seeks to serve, at minimum, adult learners, transfer students, and the full high school life-cycle. Other populations of interest are parents/guardians, high school counselors, and academic advisors.

38. We understand you had started development on the ADVI chatbot already. Which platform did you use to build? Would you be able to export files of the conversation, such as JSON or CSV, at the onset of the project?

RESPONSE: The current technology is our current vendor's proprietary cloud-based application. THECB can share the knowledge base and campaign scripts with the selected vendor during the discovery phase.

39. Would you be able to provide us with a basic user flow with the desired software solution? (For example, would an end user access from a login page or would anyone have public access?)

    RESPONSE: The desired user flow is any Texan can subscribe to ADVi by texting ADVi and agreeing to its terms of service or optin-in through integrated applications (I.e. Apply Texas and My Texas Future). THECB does not have a preferred software solution. THECB seeks a full-service chatbot provider.

40. Could you please help us by giving a few examples of metadata/SMS queries pertaining to the dashboard functionality for the administrative platform?

    RESPONSE: Monthly and yearly reports of student contacts as well as student engagement reports. (Details of the reports to be agreed upon at a later date.) Administrative access to program reports should include aggregate and individual user data.

41. Which languages are to be taken into consideration?

    RESPONSE: THECB seeks a multilingual solution.

42. What is the Azure CRM currently being used for?

    RESPONSE: THECB is currently using the CRM to facilitate communication between students and institutions of higher education.

43. Questions pertaining to support on telephone conversations and other means, including email:
    a. Which telephony system is being used currently?
    b. Which email service provider is being utilized?
    c. Is skill based routing to agents a requirement for email routing?

    RESPONSE: The current system is our current vendor's proprietary cloud-based application.

44. Please help us with a few examples of proactive texting in this scenario.

RESPONSE:
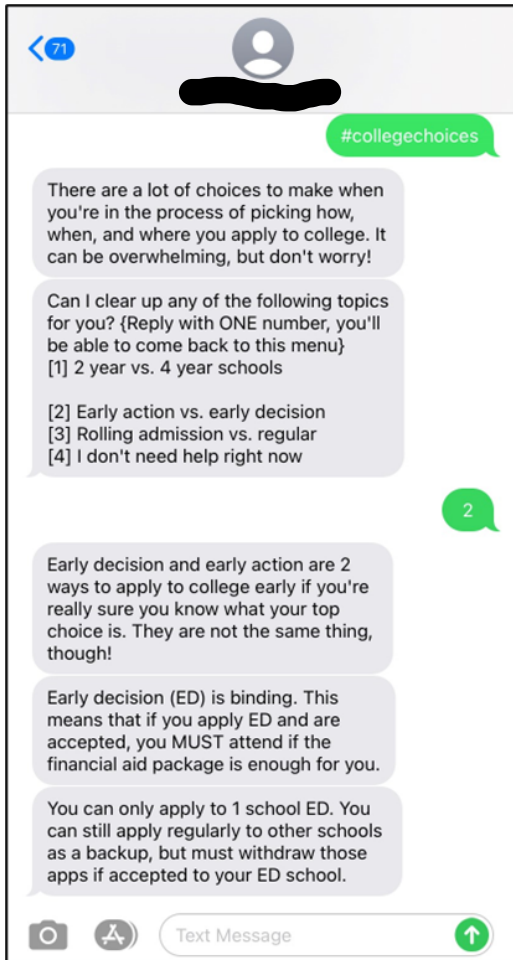
45. What are the current data sources which are expected to be leveraged for LLM?

     RESPONSE: The current data sources include the THECB owned knowledge base and campaign scripts. The LLM to be leveraged would be agreed upon during the discovery phase.

46. Please list down the API integrations to be performed.

     RESPONSE: The webbot should integrate with Apply Texas and My Texas Future. Other API integrations could be necessary based on the proposed solution.

47. Please help us with a few conversation flow examples.

     RESPONSE:
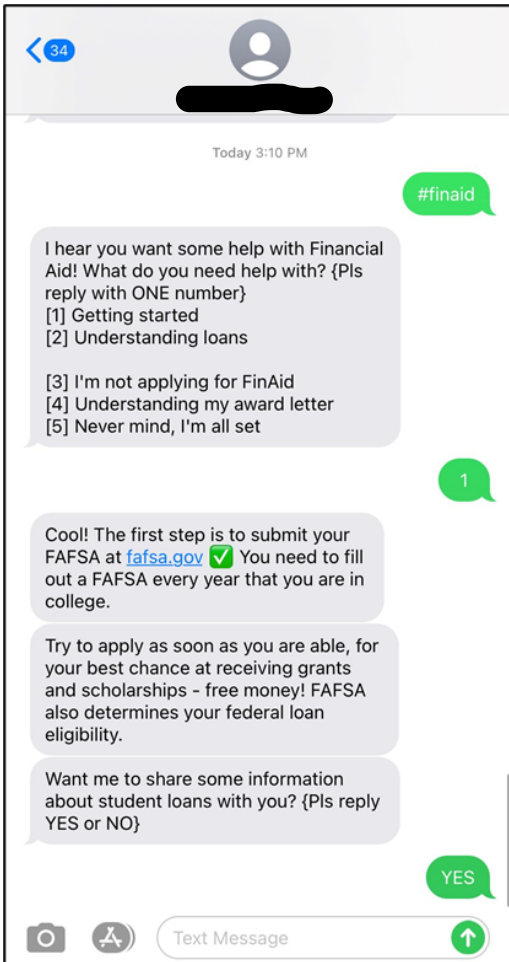
48. Which BI tool is to be considered for integration? Please confirm if Quicksight is the preferred tool.

    RESPONSE: THEC does not have a preferred BI tool.

49. How many users do currently engage with ADVi on a monthly/yearly basis? What is the maximum number of concurrent users the platform has handled?

    RESPONSE: For the class of 2022, nearly 240,000 were contacted. Of that population, over 151,000 users (64% of the population) were actively engaged, meaning they sent at least one text messages to the ADVi chatbot during the annual cycle. Over that same period, ADVi sent this audience over 28,000,000 messages.

50. Questions pertaining to campaigns:
    a. What is the current campaign management process?

b. Is there an existing campaign library? If yes, please list down the data pointers currently being utilized.

c. Please provide more details around the current campaign content structure as well as scheduling and deployment of the scripts.

d. What are the different channels to be used for the campaigns- SMS/Email/any other?

e. Is there a need for a separate web-application to manage campaigns?

RESPONSE:

a. The current vendor creates all campaigns. THECB provides review and final approval.

b. The current campaign library is a bespoke solution.

c. The current campaign structure typically follows the academic school year with customizations based on the population. Our vendor manages the scheduling and deployment of the scripts based on review and final approval by the THECB.

d. At minimum, the solution must support SMS.

e. The solution should include a mechanism for campaign management.

51. Will you require chat escalation to live agents? If so, do you have a current chat platform for live agents? Please provide details.

RESPONSE: The THECB ADVi advisors are available Monday through Friday 8:00am to 5:00 pm CT to respond to chat escalations. This solicitation seeks an administrative platform (plug in and/or app) to manage and monitor responses and run segmented campaigns based on different needs of functional areas (Any additional fees for these tools should be included in Respondent's proposed pricing).

52. Are there APIs available for integration to ApplyTexas and My Texas Future? Please provide details if available.

RESPONSE: Yes, there are APIs for integration to ApplyTexas and My Texas Future. The APIs are not publicly available. If selected, they would be made available to the vendor.

53. Are you all hoping to enhance or modify your current chatbot, thus remaining on the current technology that is doing it? Or are you open to implementing a new chatbot from the ground up?

RESPONSE: The current technology is our current vendor's proprietary cloud-based application. This solicitation seeks a full-service chatbot provider.

54. Do you need a custom LLM knowledge base or integration with pre-trained language model like GPT? Section 3.1/ Page 4

RESPONSE: The LLM to be leveraged would be agreed upon during the discovery phase.

55. What is the expected volume of Segmented campaigns each month/year? Section 3.1/ Page 4

RESPONSE: At minimum, THECB seeks to serve adult learners, transfer students, and the full high school life-cycle. Other populations of interest are parents/guardians high school counselors, and academic advisors.

56. Are you primarily looking for expert help in a staff augmentation type of relationship to continue the buildout of ADVi as it's currently planned?

RESPONSE: No, the THECB seeks a full-service chatbot provider.

57. How many people do you currently have managing ADVi?

RESPONSE: The THECB is currently under contract with a full-service chatbot vendor. THECB employs six full-time ADVi advisors to respond to escalations.

58. Are you open to new low-code chatbot technologies (either as a replacement or add-on)?

RESPONSE: THECB seeks a full-service chatbot solution. THECB does not have a preferred solution.

59. Approximately how many students will ADVi serve annually?

RESPONSE: For the graduating class of 2022, nearly 240,000 high school seniors were contacted. Of that population, over 151,000 users (64% of the population) were actively engaged, meaning they sent at least one text messages to the ADVi chatbot during the annual cycle. Over that same period, ADVi sent this audience over 28,000,000 messages. With this solicitation, THECB seeks to serve, at minimum, adult learners, transfer students, and the full high school life-cycle. Other populations of interest are parents/guardians, high school counselors, and academic advisors.

60. What is the current state of development and deployment of ADVi? Please provide as much detail as possible regarding the system architecture, user interface, LLM, knowledge base, etc.

RESPONSE: The current technology is our current vendor's proprietary cloud-based application.

61. Is THECB open to using the vendor's existing AI chatbot, live chat, and texting platform as a starting point for further development and deployment of ADVi, or, does THECB expect the vendor to continue developing ADVi within the currently defined architecture?

    RESPONSE: THECB does not have a preferred solution.

62. Assuming the vendor is planning to leverage pre-existing intellectual property in their solution, will THECB be entering into a separate licensing agreement for the pre-existing materials with the vendor to address the specifics for what the terms and conditions of the irrevocable license are?

    RESPONSE: If it is necessary for THECB to have access to the selected vendor's pre-existing intellectual property in order to utilize the proposed solution, THECB anticipates the need to either add licensing terms and conditions to the resulting contract or enter into a separate licensing agreement or addendum with the vendor regarding that intellectual property. Any such terms and conditions will be subject to final approval by THECB. THECB will not agree to any terms and conditions that violate state or federal law.

63. Please describe how ADVi should handle user escalations with regard to integration with THECS's Azure architecture of client CRM.

    RESPONSE: The vendor should propose a solution for how ADVi should handle user escalations.

64. Regarding integration with ApplyTexas (https://www.applytexas.org/) and MyTexasFuture (https://www.mytexasfuture.org/), do these portals support embedding javascript code? What other functionality is expected for integration with these portals?

    RESPONSE: Yes, ApplyTexas and My Texas Future support embedded javascript. There are also APIs for integration to ApplyTexas and My Texas Future. The APIs are not publicly available. If selected, they would be made available to the vendor.

65. Regarding reporting, if required reports are accessible within the platform admin portal, will THECB expect the vendor to further manipulate or engage with these reports?

    RESPONSE: Yes, the vendor should expect that reporting capabilities be on a regular maintenance cycle for changes or enhancements.

66. Regarding the Contract Changes clause, if the THECB changes in scope or requirements cause an increase in price, can the vendor submit a request for an equitable adjustment on the price?

RESPONSE: This would be dependent on the individual facts and circumstances that occur during contract negotiations with the selected vendor(s).

67. From Section 2.2.1: Are actual resumes of team members required or can we summarize their education and experience in a shorter format? Please clarify what you would like to have specifically provided and if you are flexible about the format it is presented in.

RESPONSE: Resumes are not a requirement. The proposal should make clear the expertise and capabilities of the team.

68. Could you please further clarify this description at the end of section 3.2: "Capabilities to display THECB's My Texas Future advisor portal information and Apply Texas counselor suite information within the administrative platform with a seamless user interface"

RESPONSE: If a user is also an Apply Texas user and/or My Texas Future user, the administrative portal should display their activity across the suite of products.

69. For the purposes of pricing in Section 5.1, how many contacts do you intend to text from September 2023 through August 2024, ideally broken down by audience to allow us to estimate the ideal frequency of texting based on the audience type (i.e. seniors, juniors, college students, SCNC, etc.)

RESPONSE: For the graduating class of 2022, nearly 240,000 high school seniors were contacted. Of that population, over 151,000 users (64% of the population) were actively engaged, meaning they sent at least one text messages to the ADVi chatbot during the annual cycle. Over that same period, ADVi sent this audience over 28,000,000 messages. With this solicitation, THECB seeks to serve, at minimum, adult learners, transfer students, and the full high school life-cycle. Other populations of interest are parents/guardians, high school counselors, and academic advisors.

70. Para 4: 'THECB seeks one or more vendors <u>to continue</u> the development and deployment of ADVi'. **Question - What development and deployment has taken place thus far? Are we delivering something new, or building upon existing?**

RESPONSE: The current technology is our current vendor's proprietary cloud-based application. The selected vendor can expect to build upon the existing knowledge base content and campaign scripts.

71. Para 4: 'ADVi is supported by a team of trained virtual advisors, provided by THECB'. **Question - details on this team. # of individuals? Is this the team that people get routed to should they have additional questions/needs?**

RESPONSE: This is a team of 6 professional virtual advisors. This team responds to escalations.

72. Para 2: 'An Opt-in/opt-out system'. **Question - How does the Opt-in and Opt-out system verify a student's age?**

RESPONSE: The vendor is responsible for proposing a solution for the opt-in and opt-out system and age verification.

73. Para 18: 'Provide multilingual communications'. **Question - which languages would you like supported?**

RESPONSE: THECB seeks a multilingual solution.

74. 2nd to last bullet: 'Provide Seamless integration w/ ApplyTexas and My Texas Future'. **Question - can we secure more details on these systems?**

RESPONSE: THECB will provide Azure architecture during the discovery phase of the project.

75. 2nd to last sub-bullet: 'Capabilities to display THECB's My Texas Future advisor portal information and Apply Texas counselor suite information within the administrative platform with a seamless user interface'. **Question - can we secure more details on these apps?**

RESPONSE: If a user is also an Apply Texas user and/or My Texas Future user, the administrative portal should display their activity across the suite of products. THECB will provide Azure architecture during the discovery phase of the project.

76. With the understating that ADVi currently uses AI technology, can THECB confirm if the need in this RFO is to expand on the existing AI capability or replace the current AI capability?

RESPONSE: THECB is interested in a solution that expands on the current AI capabilities or replaces the current AI.

77. Can THECB provide additional details on the scope of the technical support required via telephone conversation and other means (e.g., Help Desk/Contact Center capability)?

RESPONSE: The THECB expects that the proposed solution is available to users 24/7. The vendor is responsible for ensuring the solution has a 99% operational rate. THECB prefers a vendor who can provide a dedicated partnership team.

78. What kind of platforms and devices does THECB intend the chatbot to be accessible on (e.g., web, mobile)?

    RESPONSE: The chatbot should be available on all currently supported Android and iOS devices. The webbot on Apply Texas and My Texas Future should be available on web and mobile.

79. Does THECB have any existing advising platforms, websites, or applications that the chatbot needs to integrate with?

    RESPONSE: The webbot should integrate with Apply Texas and My Texas Future.

80. Are there any specific technical constraints or compatibility requirements that need to be considered?

    RESPONSE: No.

81. What is the expected number of daily or monthly users who will interact with ADVi, and what level of concurrent user interactions should ADVi be designed to handle?

    RESPONSE: For the graduating class of 2022, nearly 240,000 high school seniors were contacted. Of that population, over 151,000 users (64% of the population) were actively engaged, meaning they sent at least one text messages to the ADVi chatbot during the annual cycle. Over that same period, ADVi sent this audience over 28,000,000 messages. With this solicitation, THECB seeks to serve, at minimum, adult learners, transfer students, and the full high school life-cycle. Other populations of interest are parents/guardians, high school counselors, and academic advisors.

82. What are the primary advisory topics and educational information that ADVi is expected to provide to users?

    RESPONSE: We expect the chatbot to have the most up-to-date source information around postsecondary and career planning including but not limited to: returning adult learners, transfer processes, financial aid, scholarships, and the full high school life cycle.

83. Can you outline the typical user interaction flow with ADVi, from initial inquiry to obtaining advising information?

RESPONSE:
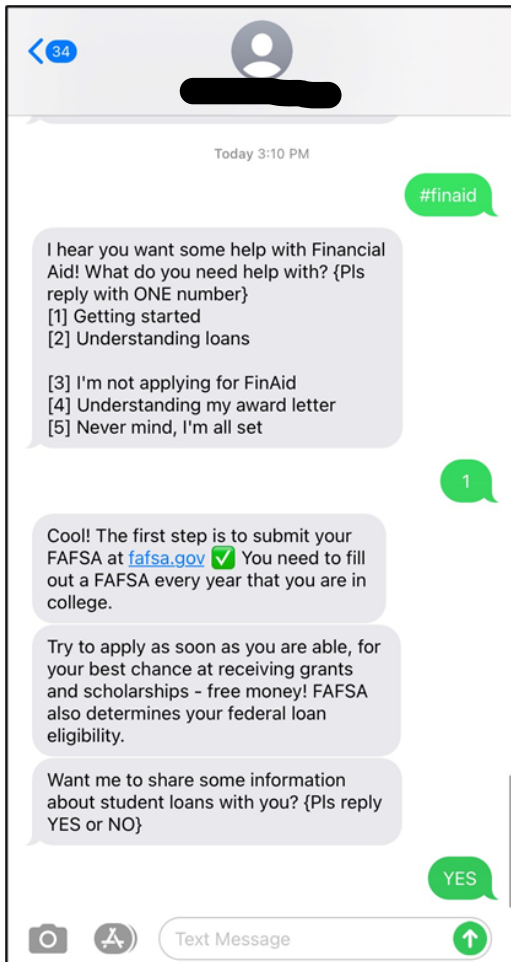
84. Are there any specific user scenarios or use cases that the chatbot should be designed to handle?

    RESPONSE: We expect the chatbot to have the most up-to-date source information around postsecondary and career planning including but not limited to: returning adult learners, transfer processes, financial aid, scholarships, and the full high school life cycle. The solution should include best practices on how to handle mental health escalations from the chatbot.

85. What training data will be available to develop and train the chatbot's AI model? How will you ensure the data is representative of diverse users?

    RESPONSE: THECB can share the current knowledge base and campaign scripts with the selected vendor during the discovery phase. The vendor is responsible for providing a solution for the training of the AI model and ensuring the data is representative of diverse users.

86. Is multilingual communication support required in the chatbot, and if so, what languages should be supported?

   RESPONSE: THECB seeks a multilingual solution.

87. Are there any specific key performance indicators (KPIs) that THECB wants to monitor?

   RESPONSE: THECB is interested in key performance indicators that support our strategic plan, Building a Talent Strong Texas.

88. What is the expected timeline for developing and deploying the chatbot, and are there any specific milestones that need to be met during the process?

   RESPONSE: The proposal should include a reasonable project timeline.

89. Can you provide more information about the budget allocation for developing ADVi, including any potential cost breakdowns?

   RESPONSE: This is a competitive solicitation, and we are unable to provide budget information.

90. Can our organization, which has a registered office in New York, USA/ London, UK, and offshore development centres in India, participate in the bidding process for this RFP/Tender? We are capable of delivering the project offshore, with the assistance of our onshore account manager for local support, as needed. Kindly confirm our eligibility to bid for this opportunity.

   RESPONSE: You may bid; however, all contract services must be performed within the continental United States.