

JUDICIAL COUNCIL OF CALIFORNIA

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REPORT TO THE JUDICIAL COUNCIL

Item No.: 20-149
For business meeting on November 13, 2020

Title

Judicial Branch Technology: Futures Commission Directive, Intelligent Chat for Self-Help Services

Rules, Forms, Standards, or Statutes AffectedNone

Recommended by

Information Technology Advisory
Committee
Hon. Sheila F. Hanson, Chair
Hon. Michael Groch, Workstream Executive
Sponsor

Agenda Item Type

Action Required

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Executive Summary

Following the final recommendations in the *Report to the Chief Justice: Commission on the Future of California's Court System*, Chief Justice Tani G. Cantil-Sakauye directed the Information Technology Advisory Committee (ITAC) to explore and make recommendations related to the use of intelligent chat technology to facilitate informational and self-help services for the public. To that end, ITAC recommends the Judicial Council accept the Intelligent Chat Workstream findings and final report. The report presents a comprehensive business case for the use of chatbots –where a person would interact with an automated system on a website to ask questions and receive information, for informational and self-help services. The report provides background research on the current state of chat technology, outlines key findings and deliverables, and sets forth recommendations for the use of intelligent chat to benefit court customers.

Recommendation

ITAC recommends that the Judicial Council, effective November 13, 2020, accept this report to satisfy the Chief Justice's directive resulting from the Future Commission's final report.

The Intelligent Chat Workstream Findings & Recommendations Report: Executive Summary and the ITAC Intelligent Chat Workstream: Findings and Recommendations Report are attached as Attachments A and B respectively.

Relevant Previous Council Action

In 2014, the Commission on the Future of California's Court System was formed. Its primary purpose was to study and recommend to the Chief Justice initiatives to effectively and efficiently serve the public by enhancing access to justice.

In early 2017, the Futures Commission presented its final recommendations to the Chief Justice in its Report to the Chief Justice: Commission on the Future of California's Court System (Attachment C). On May 18, 2017, the Chief Justice directed Judicial Council action on several of the recommendations from the Futures Commission. ITAC was directed to consider expansion of technology in the courts in three ways, one of which was to "to explore and make recommendations to the council on the potential for a pilot project using intelligent chat technology to provide information and self-help services. ... The committee should seek input for these efforts from pertinent council advisory committees and stakeholders. Where pilot projects are implemented, the committee is directed to report back on outcomes and make recommendations for statewide expansion."

In addition to taking action on Futures Commission recommendations, in mid-2017 the Judicial Council awarded 53 innovation grants to courts. These grants were authorized by the Budget Act of 2016 and focused on a broad group of innovations, modernization, and efficiency in the California court system. Four of these grants focused specifically on chatbot technology.

Analysis/Rationale

ITAC recommends the Judicial Council accept the attached report because the report provides an analysis of the current state of intelligent chat technology, includes the latest developments in the field, and proposes a path forward for using intelligent chat technology to meet the public's expectations for access to the courts.

ITAC Report Development

On July 9, 2018, ITAC formed a workstream to explore and make recommendations related to the use of intelligent chat technology for informational and self-help services. Several workstream participants were from courts that received innovations grants for intelligent chat and self-help live-

¹Chief Justice Tani G. Cantil-Sakauye to Judicial Council of Cal. Internal Committee Chairs and Admin. Director, *Addressing the recommendations of the Commission on the Future of California's Court System* (May 17, 2017).

chat portals. These participants contributed valuable information and experience toward the workstream's conclusions.

The workstream had the following goals:

- 1. Identify and prioritize self-help content appropriate for intelligent chat (in the form of user scenarios) that would provide court customers with the most value.
- 2. Identify policies that either currently *inhibit*, or would *enable*, intelligent chat implementation and adoption, including legislative, internal, or other policies.
- 3. Assess and recommend intelligent chat technologies for further exploration.

The workstream was organized into the following three tracks:

- 1. Business and Court Operations;
- 2. Technology; and
- 3. Policy and Legislative.

Workstream members researched a variety of topics. For example, the Business and Operations Track referenced the California Courts Online Self-Help Center website to identify chatbot topic areas. The Technology Track researched chatbot vendor products and services, and the Policy and Legislative Track researched privacy policies and any legislation pertaining to public agency use of chatbots. Through this research, each track then developed key findings, deliverables, and recommendations.

Simultaneous to the workstream's efforts, Judicial Council Information Technology (JCIT) sought and received limited funding from a Budget Change Proposal to deploy an initial pilot project in support of implementing an intelligent chat platform. This effort will include identifying and piloting two subject matter domains for self-help services. JCIT initiated an effort to build a branch-wide Intelligent Chat platform to provide information and self-help services to California citizens and to enable infrastructure to drive efficiency in delivering these services by the Judicial Branch.

By developing and deploying a branch wide chatbot service platform that supports multiple subject matter domains, the Judicial Council will enable California courts to enroll into its services. For those courts that wish to establish their own chatbot services, the reference architecture and design will be made available to them.

Policy Implications

Enhancing electronic access to the courts by promoting more efficient business practices through information technology aligns with the core values of the judicial branch, the branch's technology vision, and Access 3D—the Chief Justice's vision for enhancing access to the courts. The "digital court"—with the capability of an "intelligent chat" or "chatbot" function providing information online through a question-and-answer exchange— will increase access to justice. Furthermore, the workstream found there was no need for rules or legislative changes to allow for the use of chatbots. Any policies needed to ensure that chatbot policies align with those of the branch and courts will be coordinated through the JCIT web governance team.

Comments

The report was presented to ITAC during its public meeting on May 21, 2020. At its public meeting on June 8, 2020, JCTC approved the report for recommendation to the Judicial Council. The report did not circulate for public comment. Both ITAC's and JCTC's meetings discussing the report were public, but no members of the public submitted comments about the report before or after the meetings.

Alternatives considered

The Chief Justice directed ITAC to report its findings and recommendations to the Judicial Council. Accordingly, no alternatives to submitting a report were considered.

Fiscal and Operational Impacts

There are no direct fiscal or operational impacts in accepting the workstream report. However, projected implementation requirements and costs to implement intelligent chat technology for self-help will vary depending on the number of subject matter domains implemented.

Attachments and Links

- 1. Attachment A: Intelligent Chat Workstream Findings & Recommendations Report Executive Summary
- 2. Attachment B: ITAC Intelligent Chat Workstream Findings and Recommendations Report
- 3. Attachment C: Report to the Chief Justice Commission on the Future of California's Court System, 2017



Intelligent Chat Workstream

Findings & Recommendations Report



Executive Summary

1.0 OVERVIEW

Courts directly serve members of the public, who range in court experience from first-time self-represented individuals to seasoned attorneys. Given this broad spectrum of court users, a multilevel customer service approach is well suited and necessary to address court customers' varying needs, expectations, and access to justice.

Consequently, Chief Justice Tani G. Cantil-Sakauye directed the Judicial Council Information Technology Advisory Committee (ITAC) to explore and make recommendations related to the use of intelligent chat technology to facilitate informational and self-help services to the public. Intelligent chat technology includes both (1) **live chat**, where a customer would interact with a *live* person through a website; and (2) **chatbot** technology, where a person would interact with an *automated* system on a website to ask questions and receive information. The Chief Justice's directive followed the recommendation of the Commission on the Future of California's Court System, which urged the use of intelligent chat technology to enhance judicial branch service by efficiently, consistently, and reliably answering frequently asked questions.

In July 2018, ITAC convened the Intelligent Chat Workstream with the following goals:

- Identify and prioritize self-help content appropriate for intelligent chat (in the form of user scenarios) that would provide court customers with the most value.
- Identify policies that either currently *inhibit*, or would *enable*, intelligent chat implementation and adoption, including legislative, internal, or other policies.
- Assess and recommend intelligent chat technologies for further exploration.

Building on earlier court efforts related to chat services, the workstream explored evolving developments in the field and now proposes delivering chatbots to meet public need for access to the courts.

2.0 STAKEHOLDER ENGAGEMENT & WORKSTREAM ACTIVITIES

The multidisciplinary Intelligent Chat Workstream included participants from throughout the courts and Judicial Council staff. Members represented input from a wide range of stakeholders including judicial officers, court executive officers (CEOs), court information officers (CIOs), and technical and operational subject matter experts.

The workstream was organized into three tracks: (1) Business and Court Operations, (2) Technology, and (3) Policy and Legislative. Each track met regularly to discuss assigned issues, and leads held regular cross-track meetings with the Executive Sponsor and staff.

Workstream members researched a variety of topics, including referencing online self-help center content to identify the topics most often accessed by the public, analyzing chatbot vendor products and services, and researching privacy policies and legislation pertaining to the use of chatbots by public agencies. Workstream members invested considerable time consulting with technology industry experts, and incorporating learning and insight from subject matter experts. Furthermore, the workstream incorporated three key activities that were already active within the California judicial branch:

- Evaluation of the Self-Help Live Chat pilot program conducted by the Judicial Council's Center for Families, Children & the Courts (CFCC), and providing live chat for court users needing information about legally changing a name;
- Evaluation of Court Innovation Grant programs focused on Automated Chat; and
- Evaluation of business use cases for Intelligent Chat solutions.

3.0 MATURITY OF CHAT RELATIVE TO CUSTOMER SERVICE

Early in its study, the workstream defined a four-tiered system to assess the technology maturity and automation of an intelligent chat program.

Technology maturity/automation scale = LEVEL @



<u>Live chat</u> providing customer support and interaction with a human.

This chat service features a live person who interacts with customers via a chat screen, asking and answering questions to determine what information is needed for the customer to navigate their intended process. No automated chat is involved but the interactive questions and answers are stored and tracked for frequency so that the information can be used to develop automated responses.

Technology maturity/automation scale = LEVEL •



Basic chatbot answering preprogrammed questions.

This entry-level chatbot could be the customer's first point of interactive contact with the court. The chatbot's responses are limited to matching key words and responding with a list of predefined answers.

Technology maturity/automation scale = LEVEL @- @



<u>Self-learning assistant</u> with contextual understanding and growing intelligence.

This range of chatbots asks questions and uses machinelearning to grow its knowledge base and improve response accuracy, while directing customers to the requested information. If the predefined questions do not address the person's needs, the chatbot would request additional information to help direct them to potential answers. If the chatbot is still unable to address the customer's needs, it would escalate the inquiry to a live person.

4.0 KEY FINDINGS

To deliver an effective and self-learning chatbot, data must be collected from customer interactions with court experts and fed to the chatbots to organize, learn, and respond correctly. Therefore, the implementation of chat services requires starting with a Live Chat service (Level 0) and growing to deliver the more automated and sophisticated chat services (Levels 1–3).

Furthermore, the workstream found that:

- Using subject matter experts (SMEs) is crucial to developing appropriate chatbot interactions.
- Prioritizing content that is relevant for chat is critical, given the vast amounts of subject matter related to court business. Name change, eviction, and housing (unlawful detainers) topics are subjects well suited for chat given their relative level of complexity, significant amount of preexisting content, and high public demand.
- Building content for chat engines is labor intensive and represents most of the
 effort in chatbot development, including identifying questions and appropriate
 responses.

- Live chat transcripts are excellent sources for building content and training chatbots. Furthermore, analysis of the California Courts Online Self-Help Center website could be an excellent source for identifying chatbot topics.
- Machine learning and artificial intelligence need more time to mature and develop best practices for chatbot application.
- No known statutory barriers to delivering chat exist, but standard web governance policies should be addressed, such as accessibility, privacy standards, and California disclosure laws related to chat-bot use.

5.0 KEY BENEFITS & RISKS

Intelligent chat services have strong advantages and, as with all technology, are subject to identifiable and mitigatable risk. This aspect of the workstream's analysis summarily finds that:

Key benefits of automated chatbot services (Levels 1–3) include:

Increased access to justice for the public

Provides access to court assistance 24-hours a day

Provides an easy, more approachable mode of communication for many

Responds to many customers simultaneously

Enables instant responses without the wait

Enables the resolution of simple issues more quickly

The mitigatable risks of chatbot services are:

- Chatbot interactions should be monitored and updated by humans in order to provide the most accurate information (quality assurance); and
- Complex topics and conversations should be handled by a human, while more routine and basic information can be relayed through a chatbot directly to the customer.
- The line between providing information and legal advice must be carefully delineated.

6.0 RECOMMENDATIONS & NEXT STEPS

The Intelligent Chat Workstream's full report presents a comprehensive business case for use of chatbots for informational and self-help services. The report provides background research on the current state of chatbot technology, outlines key findings and

deliverables, and sets forth 12 tactical recommendations to mature the use of intelligent chat to benefit court customers.

6.1 Recommendations

The recommendations—relative to chat technology maturity—are summarized below, followed by the overarching next steps necessary to coordinate and execute a branch Intelligent Chat program for the benefit of the courts and public across the state:

LEVEL **O** For Live Chat Services and Content Development

- 1. Use subject matter experts to curate, develop, and maintain responses to anticipated user questions to support both live chat agents and chatbot services.
- 2. Set up live chat services to provide support where the chatbot cannot assist.
- 3. Use live chat services to provide immediate support to the public, with the benefit of collecting information for developing content and testing scenarios.

LEVEL **1** For Chatbot Services

- 1. Establish an intelligent chatbot program to be administered by the Judicial Council's Information Technology office with an advisory board made up of stakeholder representatives from the branch to provide direction.
- 2. Establish a centralized repository to capture and share information about the chat technology projects implemented across the branch.
- 3. Leverage the workstream deliverables to develop vendor selection criteria and master service agreement requirements for alternative chatbot platforms that can be implemented locally.
- 4. Establish statewide chatbot platforms to support different subject matters, such as Name Change, Unlawful Detainer, and Jury Services, for courts that would like to easily leverage or replicate the technology.
- 5. Develop best practices reference guides for the courts for local chatbot implementations.
- 6. Update existing branch web policies to reflect statutory and other acceptable use requirements for chat technology.
- 7. Develop chatbots to support and interface with multiple platforms such as web portals, messaging, smart speakers, and voice assistants.
- 8. Enable chatbots to support multiple languages and be ADA compliant to ensure language access is available.

LEVEL 2-3 For Advanced Machine Learning and Artificial Intelligence

1. Continue research on machine learning and artificial intelligence to improve and advance the chatbot's ability to comprehend and precisely respond to user questions.

6.2 Next Steps

The tactical next steps to execute these recommendations and develop a branch approach to intelligent chat would be to:

- Develop and execute an Intelligent Chatbot Pilot program focused on subject areas prioritized by the workstream based on frequency of use by court customers (e.g., name change, unlawful detainers, or jury services);
- Leverage existing intelligent chat technology developed as part of the Court Innovation Grant program for potential extension and reuse across the branch;
- Leverage the findings and data/content gathered from the previous judicial branch Self-Help Live Chat Pilot program for the purpose of the Intelligent Chatbot Pilot; and
- Seek funding to develop additional knowledge bases for identified subject matters.

7.0 CONCLUSION

The Intelligent Chat Workstream's research and analysis concludes that chatbots are an important tool that could help address questions from court customers more conveniently and efficiently. People could turn to a chatbot to resolve simple issues, and save time and resources. Fortunately, ample content already exists for subject matter experts to expand upon and utilize in an effort to train and improve chatbots—and live chat projects demonstrate that court customers have many common questions that are ideal for this medium of communication.

By offering online chat, the public can save the time and cost of travelling to a courthouse, and courts could provide more efficient and satisfying customer experiences. By starting with a narrow and straightforward area of court operations or law, the branch would gain valuable experience and an opportunity to continually improve its breadth and accuracy of responses. Although chatbot technology is still evolving, it could play a key role in the branch's multitiered approach to serving the public. By starting a statewide effort now, the branch will be well positioned to leverage the technology to better serve the people of California remotely and at significant scale.

Attachment: Intelligent Chat Workstream Findings & Recommendations Report

CALIFORNIA JUDICIAL BRANCH

ITAC Intelligent Chat Workstream

Findings and Recommendations Report

AUGUST 6, 2019



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1.0 EXECUTIVE SUMMARY

The Information Technology Advisory Committee convened the Intelligent Chat Workstream in July 2018 in response to direction from Chief Justice Tani G. Cantil-Sakauye to explore and make recommendations related to the use of intelligent chat technology for informational and self-help services. This directive followed the recommendation of the Commission on the Future of California's Court System (Futures Commission) to use intelligent chat services to enhance judicial branch service by efficiently, consistently, and reliably answering frequently asked questions.

The Intelligent Chat Workstream had the following goals:

- (1) Prioritize the use case scenarios most critical to the branch.
- (2) Identify legislative policies that may be an obstacle for intelligent chat.
- (3) Determine whether any legislative or internal policies are necessary to enable the adoption of intelligent chatbots.
- (4) Assess and recommend technology platforms to explore.
- (5) Submit comprehensive findings and recommendations.

The workstream was organized into the following three tracks:

- Business and Court Operations
- Technology
- Policy and Legislative

Each track held regularly scheduled conference calls to discuss their assigned issues, and track leads had regular check-ins with the chair and staff. Workstream members researched a variety of topics. For example, the Business and Operations Track referenced the California Courts Online Self-Help Center website to identify chatbot topic areas. The Technology Track researched chatbot vendor products and services, and the Policy and Legislative Track researched privacy policies and any legislation pertaining to public agency use of chatbots. Through this research, each track then developed key findings, deliverables, and recommendations.

This report presents the business case for chatbots, provides background research on the current state of chatbot technology, and describes the workstream's key findings, deliverables, and the following recommendations:

Recommendations for Chatbot Services

- (1) Establish an intelligent chatbot program to be administered by the Judicial Council's Information Technology office with an advisory board made up of stakeholder representatives from the branch to provide direction.
- (2) Establish a centralized repository to capture and share information about the chat technology projects implemented across the branch.

- (3) Leverage the workstream deliverables to develop vendor selection criteria and master service agreement requirements for alternative chatbot platforms that may be implemented locally.
- (4) Establish statewide chatbot platforms to support different subject matters, such as Name Change and Jury Services, for courts that would like to leverage or replicate the technology.
- (5) Develop best practices reference guides for the courts for local chatbot implementations.
- (6) Update existing branch web policies to reflect recent statutory and other acceptable uses required for chat technology.
- (7) Develop chatbots to support multiple media such as web portals, messaging, smart speakers, and voice assistants.
- (8) Enable chatbots to support multiple languages and be ADA compliant to ensure language access is available.

Recommendations for Live Chat Services and Content Development

- (1) Use subject matter experts to curate, develop, and maintain responses to anticipated user questions to support both live chat agents and chatbot services.
- (2) Set up live chat services to provide support where the chatbot cannot provide assistance.
- (3) Use live chat services to provide immediate support to the public with the benefit of collecting information for developing content and testing scenarios.

Recommendation for Machine Learning and Artificial Intelligence

Continue research on machine learning and artificial intelligence to improve and advance the chatbot's ability to comprehend and precisely respond to user questions.

2.0 INTRODUCTION

To improve public access to justice and to better serve current and future generations of Californians, the judicial branch of California uses intelligent chat technology to provide information and self-help services.

- Intelligent Chat Workstream Mission Statement

Transformational technology has impacted every aspect of our lives such that we have come to expect it. Waiting more than a split second for a web page to load is unacceptable. A ride share service that takes more than a few minutes to arrive is considered slow. Same-day package delivery is the new standard for shipping. In rapid fashion, online content morphed from static text on a screen to sites and apps that anticipate our needs and deliver a custom experience. Users expect this immediate personal attention and are dissatisfied with confusing, outdated and inefficient government technology that lags behind the private sector. (Dudley et al.)

In 2014, the Chief Justice charged the Futures Commission with exploring transformative ideas to improve access to justice. The Futures Commission

improve access to justice. The Futures Commission envisioned intelligent chat (a chatbot) that could understand natural language, explain a court process, look up a case, and direct a customer to a live agent. The chatbot would be available in multiple languages and be compliant with Americans with Disabilities Act (ADA) requirements. Further, its intelligence would increase over time with machine learning, enabling it to serve more people. The chatbot would handle frequently asked and simpler questions, thus freeing staff up to address the more complex issues litigants face.

"There's nothing artificial about AI. It's inspired by people, it's created by people and—most importantly—it impacts people."

 Fei Fei Li, Co-Director, Institute for Human-Centered Artificial Intelligence, Stanford University

The Information Technology Advisory Committee (ITAC) convened the Intelligent Chat Workstream in response to the Chief Justice's directive to research chatbot technology and the possibility of a pilot program.

Building on earlier court efforts with live chat and basic chatbots, the workstream explored the latest developments in the field and now proposes a path forward that would deliver chatbots that meet and even exceed public expectations for access to the courts.

¹ "[M]achine learning is 'the craft of having computers make decisions without providing explicit instructions, thereby allowing the computers to pattern match complex situations and predict what will happen.'" (Taulli; quoting Venkat Venkataramani, cofounder and CEO of Rockset, a Bay Area search and analytics company).

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3.0 GOAL ALIGNMENT

The Chief Justice directed ITAC to explore and make recommendations related to the use of intelligent chat technology for informational and self-help services. This directive followed the recommendation of the Futures Commission to use intelligent chat technology to enhance judicial branch service by efficiently, consistently, and reliably answering frequently asked questions. It is consistent with two of the judicial branch's goals set out in the *Strategic Plan for Technology 2014–2018*, Promote the Digital Court and Optimize Branch Resources.

4.0 LIVE CHAT AND CHATBOT DEFINED

4.1 Live Chat

Live chat is early chat technology that requires a human agent and a platform with an interface that enables users to enter their questions and receive responses. It also typically allows the user to print a transcript, can be multilingual, and can have a built-in evaluation system. "Dashboard" features allow a program manager to monitor usage, review past chats, and access analytics. Because the branch conducted a pilot project providing live chat for court users needing information about legally changing a name, it is included in figure 1 below as a level 0 chat interface ("CFCC Self Help Live Chat").

The live chat pilot project captured questions and answers for approximately 1,350 court users. This data will be invaluable in training chatbots because, according to the IBM developer's blog, when training a chatbot, "It is important that the utterances come from end-users. Trying to guess what end-users would say may be acceptable for initial setup but you should plan to collect and leverage real end-user utterances" (Kozhaya).

4.2 Chatbots

A chatbot "is a computer program that is capable of having a human-like conversation with a user by receiving and sending text messages for the purpose of automating a business process." (Bradford; quoting Hristo Borisov, director of product management at Progress, an app development platform provider). They can be described in three levels of progressive sophistication (Smiers) that build on each other:

■ Level 1 is a basic bot. These bots are rule-based and follow a decision tree where each action by the user prompts the bot to take action or respond. The system can only understand predefined sentences that are provided to the user in a menu (Sengupta and Lakshman).

- Level 2 extends the ability of the level 1 chatbot by incorporating natural language processing (NLP)² to develop contextual understanding.³ Users can communicate in their own words. The system uses NLP to determine the intent related to the immediate conversation. Sentences that cannot be related to intent can be used as new input for training the model. Complexity is driven by the need to find the right natural language processing tool, training the bot to understand in the appropriate context, and deciding what information to store.
- Level 3 incorporates all the capabilities of a level 2 chatbot with enhanced abilities, using AI (artificial intelligence), to develop understanding through the entire context of the conversation information, including historical analysis from previous conversations with an end user as well as those of other end users. Data can be fed into the training model or the model can use machine learning. The complexity of these chatbots lies in the variations of user input, historical analysis, training, and natural language processing combined to provide an answer.

The judicial branch has gained experience with level 1 bots (the Superior Court of Los Angeles County's Gina traffic court avatar and the California Appellate Courts Self-Help Resource Center chatbot) and is currently working on level 2 bots (the Ability to Pay Chatbot and the Los Angeles court's Jury Chatbot).

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² Natural language processing is a form of artificial intelligence that analyzes the human language. It takes many forms, but at its core, the technology helps machines understand, and even communicate with, human speech (Mills).

³ Contextual understanding is continuing to evolve. Current chatbots may have a basic ability to track the context of their conversation based on a combination of machine learning and conversational flowcharts or dialog managers, but deeper contextual understanding will be more like the human mind in that it will be able to reason (Voss).

Figure 1

Chatbot Maturity Model









	Level 0	Level 1	Level 2	Level 3
General Description	Live Chat	Basic Bot	Contextual Understanding	Self-Learning
Level of Automation	Not Applicable	• None	Semi-Assisted/ Requires Human management and controls	Fully Automated
Key Characteristic	Human operated conversation	Human to Bot Structured Conversation Simple Q&A Menu based Word based One Language	Human to Bot Unstructured Conversation Natural Language Understanding Line based intelligence Mood detection Multi-channel & language Support	Human to Bot Unstructured Adaptive Conversation Bot to Bot Conversation based intelligence Machine Learning Artificial Intelligence
Applications at the Courts	CFCC Self Help Live Chat San Mateo Live Chat	Traffic Avatar (0 LA (Gina) Riverside (Iris) Yolo Alameda (Mia) Appellate Self Help	Appellate Self Help chatbot ATP Chatbot* LA Jury Chatbot* * Planned	NONE AT THIS TIME

Most of the features that the Futures Commission envisioned for chatbots can be addressed with level 2 chatbots. Though this can address users' initial needs, it requires continual human maintenance and upkeep. Enhancing the ability to provide more effective and efficient service would require maturing chatbots to a level 3, incorporating machine learning, artificial intelligence, and integration to help enhance access for the general public.

Chatbot feature identified by Futures Commission		
1.	Multilingual capability.	2
2.	Identify the need and redirect customers to a live agent.	2
3.	Integrate with case management systems to enable online access to case information.	1, 2
4.	Natural language processing to understand questions written in a customer's own words.	2
5.	Machine learning to allow the chat system to become smarter over time.	3

5.0 BENEFITS AND RISKS OF CHATBOTS

5.1 Research Findings

A few studies have shown that consumers gravitate toward chatbots to save time. In a 2018 survey of 1,000 respondents, Usabilla, a website and app survey company, found that while 18 percent of consumers would prefer to speak with a person, 70 percent report having used a chatbot and would do so again to save time. Over half of the respondents would choose a bot over a human if it saved them 10 minutes. However, this same study showed that consumers find human interaction more enjoyable and necessary to solve complex problems (Brown).

In a joint project, "The 2018 State of Chatbots Report," MyClever, Salesforce, and others likewise found that 69 percent of consumers surveyed would use a chatbot to save time. Baby boomers were sometimes more likely to agree that a specific chatbot use case would be beneficial than were millennials (see figure 2). Most respondents agreed that chatbots work best for answering quick and simple questions as opposed to solving complex issues (Sweezey).

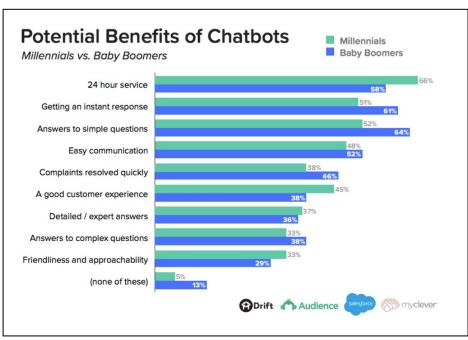


Figure 2

In a study of 3,500 consumers, Pegasystems, which develops customer relationship management software, found that most respondents reported chatbots as somewhat helpful, but generally only for simple tasks. Ying Chen, head of product marketing and platform technologies for Pegasystems, commented, "To truly depend on digital channels as the first line of defense in customer service, smart businesses need to unite their chatbots with the enterprise systems that can do real work—not just fetch bits of random information. At the same time, they must apply advanced artificial intelligence to deliver true personalized interactions in real time" (Consumers: Chatbots).

The same study identified use cases most often favored by consumers, again reinforcing that bots can be helpful and offer time-savings for answering basic questions about:

- Tracking an order (60 percent selected);
- Finding basic information (53 percent selected); and
- Asking basic questions (49 percent selected).

5.2 Benefits

The Superior Court of Los Angeles County's traffic re-engineering efforts, of which Gina is a part, has cut the wait time at traffic court from 2.5 hours to 8 to 12 minutes. Gina handles 200,000 interactions a year, which, combined with the new traffic system, allows users to take care of their traffic citations without ever coming to the courthouse ("Gina—LA's Online Traffic Avatar").

The name-change live chat pilot has also demonstrated the need and appreciation for online services. The day the service launched on the "Name Change" page of the California Courts Online Self-Help Center website, the first chatter materialized within a few minutes. Over 1,350 users were served in 180 hours with nearly 100 percent positive ratings. Customers often commented that the service saved them a trip to the courthouse.

Chatbots have the potential to bring significant benefits to courts and litigants in key areas identified by the Futures Commission, the judicial branch's *Strategic Plan for Technology*, and the *Tactical Plan for Technology*. Some of the specific types of benefits are outlined below.

Priority	Category	Explanation
1	Improved Efficiency	Increases court efficiency in triaging self-help assistance and answering frequently asked questions, freeing court staff to assist court users with more complex and individualized questions.
2	Improved Access	Provides more interactive assistance for court users, especially for self-represented litigants. Technology can be used on mobile platforms and allows users alternative means to access information, forms, and services. Chatbot is available online 24/7, significantly expanding court access outside traditional operating hours and improving access for users in more rural counties who often have significant travel time just getting to court.
3	Improved Services	Court users do not have to search multiple court webpages to identify information, forms, or services.
4	Improved Processes	Chatbot systems can be monitored and analyzed to see where process improvements can be made. Understanding the inquiry requests and patterns will enable enhancement of processes to serve court users more efficiently.

5.3 Risks

A few high-profile chatbot failures demonstrate some risks associated with chatbots. Facebook's M was delivered within Facebook Messenger

and designed to behave as a personal assistant that could make restaurant reservations, change flights, and send gifts. While customers with access to the test system loved it, it never reached more than 30 percent automation. In other words, M required too many humans, making it a cost center for Facebook. In comparison to Alexa, M tried to fulfill too many requests (Griffith and Simonite). Facebook also found that simple requests became more complex as the conversation continued, causing the natural

"What is most urgently needed now is that these ethical guidelines are accompanied by very strong accountability mechanisms."

Kate Crawford, AI Now Institute

language processing engine to fail. This same conversation pattern was observed in the branch's name change live chat pilot as well. Some users who initially asked about courthouse location ended up asking detailed questions about the process for changing their names.

In a highly publicized incident, malicious users trained Microsoft's Twitter chatbot "Tay" within hours to tweet racist, sexist, and homophobic content as well as conspiracy theories (Price). The event exposed the need for more research and improved technology before self-taught chatbots are ready for mass consumption (Gershgorn). Accordingly, emerging technologies are increasingly focusing on AI ethics and transparency. In 2016, Mark Riedl, an artificial intelligence researcher at Georgia Tech, proposed and developed training models based on stories. In Dr. Riedl's vivid example, consider a chatbot that needs medicine and determines that stealing is the most efficient way to obtain it. Through stories, the chatbot would learn that getting a prescription, waiting in line, and paying for the medicine is the ethical way that protagonists would meet their needs (Conn). In 2017, Kate Crawford and Meredith Whittaker, who founded the AI Now research institute at New York University, released a report with recommendations for ensuring development of ethics for AI. They stress that such ethics must be "baked in" to AI products, rather than considered as an afterthought (Rosenberg).

6.0 WORKSTREAM APPROACH

The Intelligent Chat Workstream established goals related to developing business requirements, assessing available technology, and researching the need for chatbot policies at project inception. To meet these goals, workstream members were assigned to the following three tracks:

- Business and Court Operations
- Technology
- Policy and Legislative

Track leads were designated and met separately with the chair to ensure coordination of the work. This was essential during phases such as developing metrics on which to assess vendors' ability to meet the requirements and in developing KPIs (key performance indicators).

Each track met every two weeks to discuss the objectives, provide input on artifacts, and to determine next steps. Additional meetings were scheduled as needed. Track leads met with the workstream chair every two weeks to coordinate efforts, as did the entire workstream for general project updates.

For the proof of concept component of the project, workstream staff reached out to courts previously awarded grants from the Court Innovations Grant Program to develop chatbot services. These information sharing discussions provided insight into technologies in development and provided the opportunity to vet the business requirements (see Appendix C). Most importantly, courts that were awarded innovation grants assessed their projects based on the requirements, thus providing invaluable information about how they can be used in a court setting in other applications.

Section 7 details the objectives, key findings, and deliverables of each track. In summary, the tracks were able to accomplish each of the workstream goals, as indicated below.

Workstream Goals	Complete
(1) Prioritize the use case scenarios most critical to the branch.	✓
(2) Identify legislative policies that may be an obstacle for intelligent chat.	✓
(3) Determine whether any legislative or internal policies are necessary to enable the adoption of intelligent chatbots.	✓
(4) Assess and recommend technology platforms to explore.	✓
(5) Submit comprehensive findings and recommendations.	✓

7.0 WORKSTREAM TRACKS

7.1 Business and Court Operations Track

7.1.1 Objectives

- Collect and assess current chat/chatbot projects.
- Define and prioritize use cases and scenarios.
- Develop list of business requirements.

• Identify KPIs and benchmark before/after success (shared task with Technology and Policy Track and Legislative Track).

7.1.2 Key Findings

- Subject matter experts are crucial to developing appropriate chatbot interactions.
- The California Courts Online Self-Help Center website is an excellent source of content to define chatbot topics.
- There is a vast amount of content, so subject matter prioritization for inclusion is critical.

7.1.3 Deliverables

Appendix	Deliverable
В	Use case scenarios
С	Intelligent chat business requirements and metrics*
D	Chatbot KPIs*

^{*} Shared with Technology Track.

7.2 Technology Track

7.2.1 Objectives

- Perform investigation and research needed and desired chatbot capabilities.
- Evaluate and assess vendor technology capabilities.

7.2.2 Key Findings

- Most of the effort in chatbot development is in building chatbot content, including identifying questions and appropriate responses.
- Live chat transcripts are excellent sources for building content and training chatbots.
- Machine learning and artificial intelligence need more time to mature and develop best practices for chatbot application.

7.2.3 Deliverables

Appendix	Deliverable
С	Intelligent chat business requirements and metrics*
D	Chatbot KPIs*

^{*} Shared with Business and Operations Track.

7.3 Policy and Legislative Track

7.3.1 Objective

• Identify the need for new rules, legislation or policies to authorize the use of intelligent chat services.

7.3.2 Key Findings

- The workstream found that there was no need for legislative changes to allow for the use of chatbots. The ITAC Rules and Policy Subcommittee's Privacy Resource Guide would be referenced for any future rules and legislative proposals.
- There are several policies relating to multiple technology platforms that need to be identified to ensure that chatbot policies align with those of the branch and courts.
 This effort will be coordinated through the Judicial Council Information Technology web governance team.
- Data ownership must be addressed in collaboration with the Data Analytics Workstream.
- The public must be informed that they are interacting with a bot per Business and Professions Code section 17941.
- The track developed language for policies and disclaimers that should be considered before launching a chatbot service.

7.3.3 Deliverables

Appendix	Deliverable
E	Example of Chatbot Disclaimer
F	Example of Compliance Policies
G	Example of Applicable Use Policy

7.4 Proof of Concept

Staff reached out to courts and leveraged the learnings from chatbot projects throughout the judicial branch, including the Court Innovations Grant Program. This cost-effective approach provided valuable information for the intelligent chat project. Workstream staff developed a set of questions to guide the discussion. They also asked that court staff review the chatbot business requirements to consider the extent to which their projects aligned with those requirements. Courts provided suggestions for further development of the requirements based on their own projects.

Courts with chatbot or live chat projects are listed below:

- Fifth Appellate District of the Court of Appeal
- Superior Court of Los Angeles County
- Superior Court of Riverside County
- Superior Court of Yolo County

- Superior Court of San Mateo County
- Superior Court of Alameda County

Key Findings

- Courts were able to assess their projects in terms of the business requirements.
- Chat/chatbot platforms ranged from live chat services to cloud-based chatbot services.
- The Superior Court of San Mateo County is implementing a live chat for their jury services.
- The Superior Court of Los Angeles County developed and implemented their traffic avatar (Gina), a level 1 chatbot service.
- The Los Angeles court is also developing a jury services chatbot that will leverage a level 1 chatbot with integration with the jury management system.
- The Riverside and Alameda courts implemented their traffic avatars (Iris and Mia, respectively), leveraging the design from the Los Angeles court's traffic avatar.
- The Superior Court of Yolo County is planning to implement their traffic avatar leveraging the Los Angeles court's traffic avatar design.
- The Fifth Appellate District of the Court of Appeal developed and implemented a level 1 chatbot for the appellate courts self-help website.

8.0 WORKSTREAM LESSONS LEARNED

8.1 Collaborations

- Collaborating with the innovation grant recipients was an effective and cost-effective method for vetting the business requirements rather than a proof of concept.
- Reaching out to the courts (chief information officer network) to leverage existing knowledge provided expertise in both subject matter and technology.
- Workstream members were stakeholders and therefore active participants, which helped drive the pace and quality of the work product.
- Existing sources of business requirements, such as those identified at the Judicial Branch Technology Summit held in August 2017, were leveraged to save time and avoid duplication of effort.
- In developing findings and recommendations, group editing was a helpful and efficient means of fine-tuning the final report.

8.2 Chatbot Technology Education

- Sessions with vendors and consultants, such as Gartner, helped improve workstream members' chat technology expertise.
- Provide a conceptual idea of what solutions will help, prior to sessions with vendors, to help improve quality of dialogue.

8.3 Tools

- SharePoint is an effective collaboration application overall, but some features are more
 effective than others. For example, the discussion board feature is cumbersome, so usage
 was low.
- SharePoint Lists were an effective way to gather business requirements from workstream members.
- Need a work-around for SharePoint if access isn't available.
- All courts should allow access to SharePoint. Staff at courts where this was not allowed
 had to work offsite, using personal equipment.

8.4 Project Management

- Periodic in-person meetings were essential to the effectiveness of the workstream, as was providing better communication.
- Establishing roles and responsibilities aided in managing the work efforts.
- Clearly identifying workstream deliverables at the beginning of the project helped set expectations regarding workstream members' time commitment.
- Having specific and smaller assignments helps workstream members participate
 effectively. Bringing together the Business and Court Operations Track and the
 Technology Track for deliverables discussions was successful and important to ensure
 all perspectives were addressed.
- From a project management perspective, two weeks was a good cadence; however, from a workstream member perspective, this was challenging.
- Agendas and straw man documents, as well as existing content created by the core project team, were shared prior to each call; minutes were published following the calls.
- Organizing by track was effective and helped move the project more quickly.
- Amount and type of communication was appropriate (twice monthly) for the workstream. Meeting notes were captured and available on SharePoint.
- Meeting notes are helpful for developing findings and recommendations.

"The new spring in AI is the most significant development in computing in my lifetime. Every month, there are stunning new applications and transformative new techniques. But such powerful tools also bring with them new questions and responsibilities."

- Sergey Brin, President, Alphabet, Inc.

9.0 CONCLUSION

The Intelligent Chat Workstream's

research and analysis shows that chatbots are part of current norms. As with all technology, they have their advantages and disadvantages. Customers have indicated that they will certainly turn to a chatbot to solve simple issues and to save even small increments of time. On the other hand, for

more complex problem solving and for a more satisfying interaction, customers prefer to talk with a human customer service agent. However, given the reality of budget constraints and the limitations of regular business hours, chatbots can and should play a role in serving judicial branch customers.

Ample developed content already exists for subject matter experts to expand upon to train chatbots. In addition, live chat projects have shown that many customers do have relatively simple questions. The chatbot would transfer customers with more complex questions to a live agent. The branch can save money and customers can save time by allowing a chatbot to field those simple questions.

By starting with a small and straightforward area of court operations or law, the branch can gain experience in training chatbots. Customers' interactions with the bot will be fed back into the system to continually improve the accuracy of chatbots' answers. Chatbot technology is still evolving; however, by starting now, the branch will be well positioned to leverage the technology to better serve the people of California.

10.0 WORKS CITED

- Bradford, Laurence. "How Chatbots are About to Change Communication." *Forbes.com*, 24 July 2017. https://www.forbes.com/sites/laurencebradford/2017/07/24/how-chatbots-are-about-to-change-communication/#3cd2cd5e4aa8.
- Brown, Eileen. "Over Half of Consumers Will Choose a Chatbot Over a Human to Save Time." *ZDNet*, 2 January 2019, www.zdnet.com/article/over-half-of-consumers-will-choose-a-chatbot-over-a-human-to-save-time/.
- Conn, Ariel. "Ethics and Creativity in Artificial Intelligence: An Interview with Mark Riedl." *HuffPost* (blog post), 1 June 2017, www.huffpost.com/entry/ethics-and-creativity-in-artificial-intelligence-an-b-593047b4e4b09e93d7964848.
- "Consumers: Chatbots Still Too Dumb to Get the Job Done." Pegasystems, Inc. news release, 9 October 2018, www.pega.com/about/news/press-releases/consumers-chatbots-still-too-dumb-get-job-done.
- Dudley, Emma, Lin, Diann-Yi, Mancini, Matteo, and Ng, Jonathan. "Implementing a Citizen-Centric Approach to Delivering Government Services." McKinsey & Company (white paper), July 2015. www.mckinsey.com/industries/public-sector/our-insights/implementing-a-citizen-centric-approach-to-delivering-government-services.
- Gershgorn, Dave. "Here's How We Prevent the Next Racist Chatbot." *Popular Science*, 24 March 2016, www.popsci.com/heres-how-we-prevent-next-racist-chatbot.
- "Gina—LA's Online Traffic Avatar Radically Changes Customer Experience." Self-Represented Litigation Network, news release, 16 October 2016, www.srln.org/node/1186/gina-las-online-traffic-avatar-radically-changes-customer-experience-news-2016.
- Griffith, Erin and Simonite, Tom. "Facebook's Virtual Assistant M is Dead. So Are Chatbots." *Wired*, 8 January 2018. www.wired.com/story/facebooks-virtual-assistant-m-is-dead-so-are-chatbots/.
- Kozhaya Joe. "10 Steps to Train a Chatbot and Its Machine Learning Models to Maximize Performance." *The developerWorks blog* (IBM Corp.), 12 December 2016, https://developer.ibm.com/dwblog/2016/10-steps-train-chat-bot-chatbot-machine-learning/.
- Mills, Terence. "What Is Natural Language Processing and What Is it Used For?" *Forbes Technology Council* (sponsored blog), 2 July 2018.

 <u>www.forbes.com/sites/forbestechcouncil/2018/07/02/what-is-natural-language-processing-and-what-is-it-used-for/#23fbe7a95d71</u>.
- Price, Rob. "Microsoft is Deleting Its AI Chatbot's Incredibly Racist Tweets." *Business Insider*, 24 March 2016, www.businessinsider.com/microsoft-deletes-racist-genocidal-tweets-from-ai-chatbot-tay-2016-3?r=UK&IR=T.

- Rosenberg, Scott. "Why AI Is Still Waiting for Its Ethics Transplant." *Backchannel* (Wired.com blog) 1 November 2017, www.wired.com/story/why-ai-is-still-waiting-for-its-ethics-transplant/.
- Sengupta, Rajarshi and Lakshman, Shankar. "Conversational Chatbots—Let's Chat." Deloitte (white paper), June 2017, https://www.deloitte.com/content/dam/Deloitte/in/Documents/strategy/in-strategy-innovation-conversational-chatbots-lets-chat-final-report-noexp.pdf.
- Smiers, Leon. "Chatting with the Chatbots? How Intelligence Makes the Conversation Work." Capgemini.com (blog post), 23 May 2017, www.capgemini.com/2017/05/chatting-with-the-chatbots-how-intelligence-makes-the/.
- Sweezey, Matthew. "69% of Consumers Prefer Chatbots for Quick Communication with Brands." Salesforce Blog, 29 January 2018, www.salesforce.com/blog/2018/01/why-consumers-prefer-chatbots.html.
- Taulli, Tom. "What You Need to Know About Machine Learning." Forbes.com (blog post), 2 March 2019, www.forbes.com/sites/tomtaulli/2019/03/02/what-you-need-to-know-about-machine-learning/#2bf2bec22fe4.
- Voss, Peter. "Beyond Chatbots: Hyper-Personalized, Intelligent Assistants." *Cognitive World* (sponsored blog), 25 February 2019, www.forbes.com/sites/cognitiveworld/2019/02/25/beyond-chatbots-hyper-personalized-intelligent-assistants/#52c401c92aba.

11.0 APPENDIXES

APPENDIX A: WORKSTREAM MEMBERSHIP

Hon. Michael Groch, Executive Sponsor

Judge of the Superior Court of California, County of San Diego

Mr. John Yee, Lead

Information Technology Architect Judicial Council

Ms. Fati Farmanfarmaian, Project Manager

Senior Business Systems Analyst Judicial Council

Members

Hon. Tara M. Desautels

Judge of the Superior Court of California, County of Alameda

Mr. Paras Gupta

Chief Information Officer Superior Court of California, County of Monterey

Mr. Brett Howard

Chief Information Officer Superior Court of California, County of Orange

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Ms. Natasha R. Moisevev

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Mr. Steve Tamura

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Mr. Stan Tyler

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Ms. Andrea K. Wallin-Rohmann

Clerk/Executive Officer Court of Appeal, Third Appellate District

Hon. Jason Webster

Commissioner of the Superior Court of California, County of Kern

Ms. Karen Cannata

Supervising Analyst Judicial Council

Mr. Anson Jen

Technology Analyst Judicial Council

Mr. Davis Luk

Senior Application Development Analyst Judicial Council

Ms. Melanie Snider

Supervising Attorney Judicial Council

Mr. Nelson Wong

Senior Application Development Analyst Judicial Council

User Types	Topic/Domains	User Intention I want to use Intelligent Chat to do:	Value User Gets From Intention Describe what you want the chatbot to do
Self Represented Litigants			
		Tell me about the basic information about	
	Getting Started	what happens in court	http://www.courts.ca.gov/selfhelp-start.htm
	Court Basics	Basic Overview	http://www.courts.ca.gov/997.htm
		How Courts Work	http://www.courts.ca.gov/998.htm
		Types of Cases	http://www.courts.ca.gov/1000.htm
		Services at Your court	http://www.courts.ca.gov/1077.htm
		Representing Yourself	http://www.courts.ca.gov/1076.htm
		Basics of Court Form	http://www.courts.ca.gov/selfhelp-forms.htm
		Court Basics FAQ	http://www.courts.ca.gov/9323.htm
	Lawyers and Legal Help	Basic Information	http://www.courts.ca.gov/1001.htm
		Free and Low-Cost Legal Help Help from Your court Finding a Lawyer Limited-Scope Representation	http://www.courts.ca.gov/selfhelp-lowcosthelp.htm http://www.courts.ca.gov/1083.htm http://www.courts.ca.gov/selfhelp-findlawyer.htm http://www.courts.ca.gov/1085.htm
		Law Libraries, Websites, and Self-Help Books	http://www.courts.ca.gov/1091.htm
		Lawyers and Legal Help FAQs	http://www.courts.ca.gov/1086.htm
	Preparing for Court	Information Needed to Be Ready for Court	http://www.courts.ca.gov/1002.htm
		Before You File a Case	http://www.courts.ca.gov/12414.htm
		Filing Papers in Court	http://www.courts.ca.gov/1089.htm
		Fee Waivers	http://www.courts.ca.gov/selfhelp-feewaiver.htm
		Service of Process	http://www.courts.ca.gov/selfhelp-serving.htm
		Discovery	http://www.courts.ca.gov/1093.htm
		Going to Court	http://www.courts.ca.gov/1094.htm
		Court Interpreters	http://www.courts.ca.gov/selfhelp-interpreter.htm

User Types	Topic/Domains	User Intention Preparing for Court FAQs	Value User Gets From Intention http://www.courts.ca.gov/1096.htm
	Researching the Law	How to Research Laws	http://www.courts.ca.gov/1003.htm
		Finding and Using the Law that Applies to Your Case	http://www.courts.ca.gov/1097.htm
		Research Codes and Statutes Research Cases Researching Law FAQs	http://www.courts.ca.gov/1098.htm http://www.courts.ca.gov/1099.htm http://www.courts.ca.gov/1100.htm
	Resolving Your		
	Dispute Out of Court	How to Solve Disputes Out of Court	http://www.courts.ca.gov/selfhelp-adr.htm
		Agreements in Family Law Cases ADR Resources	http://www.courts.ca.gov/29226.htm http://www.courts.ca.gov/1101.htm
		Resolving Your Dispute Out of Court FAQs	http://www.courts.ca.gov/12434.htm
	FAQs	Frequently Asked Questions about the Courts	http://www.courts.ca.gov/1006.htm
	Questions that may be asked	How can I find a mediator for child custody? I do not have a court case. How do I know what courthouse to file my guardianship case? Can I make an appointment for self-help over email?	
		How can I file a complaint about a Judge?	
		How can I dismiss my case? How can I file a complaint about an attorney?	

User Types	Topic/Domains	User Intention	Value User Gets From Intention
		Is it legal for me to be served in the mail?	
		Can you please tell me how to file for a hearing before a specific Judge? How can I find my case number? How do I e-file? How much does it cost to e-file? Can I get a fee waiver for e-filing costs? How much does it cost to file an Income Withholding Order? I filled out the forms I found online-is there someone who can review them to tell me if I did them right? What if I don't speak English? How can I get someone to help me? How can I get a mediator to help with my small claims case?	
		Can I take my papers to the local police office to serve or is there a special office I should go to so that they serve my papers?	
		The other party and I have come to n agreement. How do I cancel my Request for Order? Can I get an interpreter for my Small Claims case?	
		Can I bring my children to court with me?	
	Family & Children Custody & Parenting Time (Visitation)	Basic Information	http://www.courts.ca.gov/selfhelp-custody.htm

User Types	Topic/Domains	User Intention Parenting Time: Developing Plans Custody and Parenting Time (Visitation) Orders Custody Mediation Supervised Visitation Custody and Domestic Violence	Value User Gets From Intention http://www.courts.ca.gov/16432.htm http://www.courts.ca.gov/15870.htm http://www.courts.ca.gov/1189.htm http://www.courts.ca.gov/1190.htm http://www.courts.ca.gov/1191.htm
	Child Support	Basic Information Asking for a child support order Responding to a Child Support Order Changing a Child Support order Paying a Child Support Order Collecting a Child support Order Forms Child Support FAQ	http://www.courts.ca.gov/selfhelp-support.htm http://www.courts.ca.gov/1194.htm http://www.courts.ca.gov/1195.htm http://www.courts.ca.gov/1196.htm http://www.courts.ca.gov/1197.htm http://www.courts.ca.gov/1198.htm http://www.courts.ca.gov/1199.htm http://www.courts.ca.gov/1200.htm
	Parentage/Paternit y	Basic Information Establishing Parentage/Paternity Disputing Parentage Forms Parentage FAQs	http://www.courts.ca.gov/selfhelp-parentage.htm http://www.courts.ca.gov/1201.htm http://www.courts.ca.gov/1202.htm http://www.courts.ca.gov/1203.htm http://www.courts.ca.gov/1204.htm
	Child Abuse & Neglect	Basic Information Guide to Dependency Court- For Parents Guide to Dependency Court- For Children Guide to Dependency Court- For Caregivers	http://www.courts.ca.gov/selfhelp-childabuse.htm http://www.courts.ca.gov/1205.htm http://www.courts.ca.gov/29205.htm http://www.courts.ca.gov/29206.htm
		Juvenile Court Guardianship De Facto Parents	http://www.courts.ca.gov/1206.htm http://www.courts.ca.gov/1207.htm

User Types	Topic/Domains	User Intention Forms Child Abuse and Neglect FAQs	Value User Gets From Intention http://www.courts.ca.gov/1208.htm http://www.courts.ca.gov/1209.htm
	Guardianship	Basic Information	http://www.courts.ca.gov/selfhelp-guardianship.htm
		Alternatives to Guardianship	http://www.courts.ca.gov/1210.htm
		Duties of a Guardian	http://www.courts.ca.gov/1211.htm
		Becoming a Guardian	http://www.courts.ca.gov/1212.htm
		Ending a Guardianship	http://www.courts.ca.gov/1213.htm
		Forms	http://www.courts.ca.gov/1214.htm
		Guardianship FAQs	http://www.courts.ca.gov/1215.htm
	Questions that might be asked	Do I need guardianship of the estate?	
	S	Can I get joint custody with one of the parents?	
		My child is an insurance beneficiary and the insurance company won't release the money without a guardianship. Why do I need a guardianship for my own child?	
		Can two people file to be guardians? My mother is trying to get guardianship of my kids. How do I object?	
	Juvenile Delinquency	Basic Information	http://www.courts.ca.gov/selfhelp-delinquency.htm
		Guide to Juvenile court Sealing Juvenile Records	http://www.courts.ca.gov/1216.htm http://www.courts.ca.gov/28120.htm
		Forms	http://www.courts.ca.gov/28120.htm
		Juvenile Delinquency FAQs	http://www.courts.ca.gov/1217.htm
	Adoption	Basic Information	http://www.courts.ca.gov/selfhelp-adoption.htm

User Types	Topic/Domains	User Intention Forms Adoption FAQS	Value User Gets From Intention http://www.courts.ca.gov/1219.htm http://www.courts.ca.gov/1220.htm
	Emancipation	Basic Information	http://www.courts.ca.gov/selfhelp-emancipation.htm
		How-to-Guide	http://www.courts.ca.gov/1221.htm
		Forms	http://www.courts.ca.gov/1222.htm
		Emancipation FAQs	http://www.courts.ca.gov/1223.htm
	Special Education Rights for Children and Families	Basic Information	http://www.courts.ca.gov/1106.htm
		Special Education Needs and Services	http://www.courts.ca.gov/35474.htm
		Assessments and Eligibility	http://www.courts.ca.gov/35397.htm
		IEPs (Individualized Education Programs)	http://www.courts.ca.gov/35398.htm
		Rights of Parents	http://www.courts.ca.gov/37476.htm
		Behavior and School Discipline	http://www.courts.ca.gov/35473.htm
		Find Help and More Information	http://www.courts.ca.gov/37475.htm
	Special Immigrant Juvenile Status	Basic Information	http://www.courts.ca.gov/selfhelp-sijs.htm
	FAQs		http://www.courts.ca.gov/1030.htm
	Questions that may be asked	How can I get help with the first steps to modify custody/visitation? What is a "good cause exemption?"	
		How can I get a "good cause exemption?"	

User Types	Topic/Domains	User Intention How do I fill out paperwork to establish sole custody of my child	Value User Gets From Intention
		Where do I get a custody hearing started? How can I add the father to the birth certificate? If my name is on the child's birth certificate am I already established legally as the parent? How can I establish custody rights in California? We are reconciling-how do we dismiss our	
		custody orders? If I was never married to the father of my child do I have to establish any type of legal paperwork before efiling for child support? How can I get grandparent rights? How can I get a court appointed attorney for my custody case? How do I remove the father's name from the child's birth certificate? I want to put something in the file to tell the Judge about what is happening in my case. How do I do that?	
		How much does it cost to file for custody? How should I serve my Request for Order- can I do it personally or does it have to be in the mail?	

User Types	Topic/Domains	User Intention	Value User Gets From Intention
		My ex and I have been split up for the last 7 years and never filed proper custody papers nor does he pay child support. I need to start the process on this - how can I do it and not be taken advantage of by him? Please help!! My ex and I divorced and now she won't let me see my stepchild. I raised her! How can I get visitation? I do not like the mediation report- what can I do? How do I change mediators?	
	Divorce or		
	Separation		http://www.courts.ca.gov/selfhelp-divorce.htm
	Basics	Basic Information	http://www.courts.ca.gov/1032.htm
		Options to End Marriage or Domestic Partnership	http://www.courts.ca.gov/1224.htm
		Overview of the Court Process	http://www.courts.ca.gov/1225.htm
		Resolve Your Divorce or Separation Out of Court	http://www.courts.ca.gov/1226.htm
		Basic FAQs	http://www.courts.ca.gov/1227.htm
	Filing for Divorce or Separation	Basic Information	http://www.courts.ca.gov/1033.htm
		Prepare for Filing Your Case	http://www.courts.ca.gov/1228.htm
		Filing Your Case	http://www.courts.ca.gov/1229.htm
		Forms	http://www.courts.ca.gov/1230.htm
		Filing for Divorce or Separation FAQs	http://www.courts.ca.gov/1231.htm
	Responding to		
	Divorce or	Basic Information	http://www.courts.ca.gov/1034.htm
	Separation		,,,

User Types	Topic/Domains	User Intention Options to Respond Default/Uncontested Process Contested Process Forms	Value User Gets From Intention http://www.courts.ca.gov/1232.htm http://www.courts.ca.gov/1233.htm http://www.courts.ca.gov/1234.htm http://www.courts.ca.gov/1235.htm
	Completing Divorce or Separation	Basic Information	http://www.courts.ca.gov/1035.htm
		Default/Uncontested Case	http://www.courts.ca.gov/1237.htm
		Contested Case	http://www.courts.ca.gov/1238.htm
		Common Problems in Completing Your Divorce or Separation	http://www.courts.ca.gov/8412.htm
		After Your Divorce is Final	http://www.courts.ca.gov/8413.htm
		Forms	http://www.courts.ca.gov/1239.htm
		Completing Divorce or Separation FAQs	http://www.courts.ca.gov/1240.htm
	Summary Dissolution	Basic Information	http://www.courts.ca.gov/selfhelp-summarydissolution.htm
		For Married Couples	http://www.courts.ca.gov/1241.htm
		For Domestic Partners	http://www.courts.ca.gov/1242.htm
		For Couples Ending Marriage and Domestic Partnership	http://www.courts.ca.gov/16430.htm
	Annulment	Basic Information	http://www.courts.ca.gov/1037.htm
		Filing for Annulment	http://www.courts.ca.gov/1244.htm
		Responding to Annulment	http://www.courts.ca.gov/1245.htm
		Forms	http://www.courts.ca.gov/1246.htm
		Annulment FAQs	http://www.courts.ca.gov/1247.htm
		How do I set a prove-up hearing for my annulment?	

User Types	Topic/Domains	User Intention	Value User Gets From Intention
	Spousal/Partner Support		http://www.courts.ca.gov/1038.htm
		Basic Information	http://www.courts.ca.gov/9050.htm
		Asking for a Spousal/Partner Support Order	http://www.courts.ca.gov/1249.htm
		Responding to a Spousal/Partner Support Order	http://www.courts.ca.gov/1250.htm
		Changing (or Ending) a Spousal/Partner Support order	http://www.courts.ca.gov/1251.htm
		Paying a Spousal/Partner Support Order	http://www.courts.ca.gov/1252.htm
		Collecting a Spousal/Partner Support Order	http://www.courts.ca.gov/9143.htm
		Forms	http://www.courts.ca.gov/1253.htm
		We split up and I have no money. How can I get a quick spousal support order? Spousal/partner Support FAQs	Information re ex parte orders
	Property and Debt in a Divorce or Legal Separation		http://www.courts.ca.gov/1039.htm
	Legal Separation	Basic Information	http://www.courts.ca.gov/1254.htm
		Dividing Property and Debts in a Divorce	http://www.courts.ca.gov/9330.htm
		Collect your Family Law Money Judgement	http://www.courts.ca.gov/1255.htm
		Omitted assets after judgment Property and Debt FAQs	
	Forms		http://www.courts.ca.gov/8218.htm
	FAQs		http://www.courts.ca.gov/1040.htm

User Types	Topic/Domains Questions that may be asked	User Intention	Value User Gets From Intention
			locate and deliver information about divorce vs legal separation
		Can you tell me what's the difference between divorce vs legal separation	locate and deliver information about divorce timelines, including information about bifurcation
		tell me how long it will be until my divorce will be final	locate and deliver information about divorce timelines, including information about Catholic divorce rules vs legal
		tell me if I can get an annulment because I was married less than a year What forms do I need to fill out? Can I set up an appointment? May I get a change of venues How do I change my court date? What is a stipulation?	
		What forms do I need to change custody	
		What forms do I need to get custody? How do I serve my divorce papers? What do I need to do to get custody of my child?	
		I don't like my judge, can I change judges?	
		Can I spend any of the money in our joint account? My spouse took my car. How do I get it back?	locate and deliver information about ex parte property control Request for Order
		My spouse moved out and stopped paying the rent. What can I do?	locate and deliver information about ex parte property control Request for Order or payment of bills
		Can I leave the state? Next step after filing my papers?	

User Types	Topic/Domains	User Intention I filed my papers and served the other party but I haven't gotten my judgment yet. Why not? How do I get a copy of my final judgement in my divorce Is my paperwork ready? How do I dismiss a case? What happens if the other party doesn't appear in court? How do I petition to get my adoption records? I need to get a copy of someone else's divorce Judgment. How can I do that? Can I buy forms at the courthouse? How much do they cost?	Value User Gets From Intention
		The other party was ordered to come pick up their personal belongings but they will not do it. What can I do with their stuff? We are reconciling-how do we drop our case?	
		My husband cleaned out the bank accounts and now I cannot pay the bills-can I get an order for him to put it back?	
		What is contempt? How can I change my divorce settlement agreement? I need to talk to the Judge. How can I do that? What if I agree with what my spouse put in her divorce papers? Do I have to pay to respond?	

User Types	Topic/Domains	User Intention	Value User Gets From Intention
		How do I get emergency custody orders?	
		What if I need to talk to the Judge before the hearing date?	
		I have recently found out that my husband has struggled with his sexual orientation and was wondering if that would qualify as fraud to get an annulment?	
	Abuse & Harassment	My divorce was bifurcation due to the fact that we could not agree on a property settlement this was in 2010. I want to know what forms I have to file to close out the property settlement portion so I can have this done with. THEIRO, I WAS WOILDERING II YOU COULD HELP THE find out if I have to come to the court house or can I get the paper work to file for a divorce caling. My ex wants to move 30 miles away and take our daughter. Is there anything I can do to prevent her from doing that?	http://www.courts.ca.gov/selfhelp-abuse.htm
	Basics		http://www.courts.ca.gov/1041.htm
	Domestic Violence		http://www.courts.ca.gov/selfhelp-domesticviolence.htm
		Basic Information Make a Safety Plan Ask for a Restraining Order Respond to a Restraining Order Enforce a Restraining Order Renew a Restraining Order	http://www.courts.ca.gov/1263.htm http://www.courts.ca.gov/1264.htm http://www.courts.ca.gov/1265.htm http://www.courts.ca.gov/1266.htm http://www.courts.ca.gov/1267.htm http://www.courts.ca.gov/34737.htm http://www.courts.ca.gov/1268.htm

User Types	Topic/Domains	User Intention Change or End a Restraining Order Children and Domestic Violence Criminal Court Process Forms	Value User Gets From Intention http://www.courts.ca.gov/1269.htm http://www.courts.ca.gov/1271.htm http://www.courts.ca.gov/1272.htm
	Elder and Depend Adult Abuse	Domestic Violence FAQs	http://www.courts.ca.gov/selfhelp-elder.htm
			http://www.courts.ca.gov/1273.htm
		Basic Information	http://www.courts.ca.gov/1274.htm
		Ask for a Restraining Order	http://www.courts.ca.gov/1275.htm
		Respond to a Restraining Order	http://www.courts.ca.gov/16483.htm
		Enforce a Restraining Order	http://www.courts.ca.gov/1276.htm
		Renew a Restraining Order Forms	http://www.courts.ca.gov/1277.htm
	Civil Harassment	Elder and Dependent Abuse FAQs	http://www.courts.ca.gov/1044.htm
			http://www.courts.ca.gov/1278.htm
		Basic Information	http://www.courts.ca.gov/1279.htm
		Ask for a Restraining Order	http://www.courts.ca.gov/1280.htm
		Respond to a Restraining Order	http://www.courts.ca.gov/16484.htm
		Enforce a Restraining Order	http://www.courts.ca.gov/1281.htm
		Renew a Restraining Order Forms	http://www.courts.ca.gov/1282.htm
	Workplace Violence	Civil Harassment FAQs	http://www.courts.ca.gov/1045.htm
			http://www.courts.ca.gov/1283.htm
		Basic Information	http://www.courts.ca.gov/1284.htm
		Ask for a Restraining Order	http://www.courts.ca.gov/1285.htm
		Respond to a Restraining Order	http://www.courts.ca.gov/16486.htm
		Enforce a Restraining Order	http://www.courts.ca.gov/1286.htm
		Renew a Restraining Order Forms	http://www.courts.ca.gov/1287.htm

User Types	Topic/Domains	User Intention	Value User Gets From Intention
	Gun Violence Restraining Orders	Workplace Violence FAQs	http://www.courts.ca.gov/33961.htm
	· ·		http://www.courts.ca.gov/33679.htm
		Basic Information	http://www.courts.ca.gov/33680.htm
		Ask for a Firearm Restraining Order	http://www.courts.ca.gov/33682.htm
		Respond to a Request for Firearm Restraining Order	http://www.courts.ca.gov/33681.htm
		Terminate(end) a Firearms Restraining Order	http://www.courts.ca.gov/33683.htm
		Renew a Firearms Restraining Order	
	Victim Assistance	Forms	http://www.courts.ca.gov/1107.htm
			http://www.courts.ca.gov/25810.htm
		Basic Information	the state of the s
	FAQs	Restitution Forms	http://www.courts.ca.gov/1046.htm
	Questions that may be asked		
		I need a restraining order, what do I do?	
		What do I do if they break the restraining order?	
		How do I end a temporary restraining order?	
		How do I end a restraining order? When are ex-parte hearings heard? Can I have the restraining order served by mail?	
		How can I have the Sheriff serve for me?	
		What if the Respondent hides from being served? What can I do?	New law re: alternative service when evasion of service in DV is proven

User Types	Topic/Domains	User Intention Does it cost money for the Sheriff to serve? How much? Can I add another protected party to my restraining order? Someone added me to their restraining order but I don't want protection, How do I remove myself? What if the other party gets their friends to harass me?	Value User Gets From Intention
		Can I get the restraining order extended?	
		What is the difference between a Civil Harassment and a Domestic Violence Restraining Order? Can I get a restraining order to kick my roommate out of the house? Can someone email me the forms I need to fill out? How can I get a confidential address?	
	Eviction & Housing		http://www.courts.ca.gov/selfhelp-housing.htm
	Eviction		http://www.courts.ca.gov/selfhelp-eviction.htm
	Foreclosure		http://www.courts.ca.gov/1048.htm
	Security Deposits		http://www.courts.ca.gov/1049.htm http://www.courts.ca.gov/1293.htm
	FAQs	Security Deposits FAQs	http://www.courts.ca.gov/11034.htm
	Questions that may be asked		

User Types	Topic/Domains	User Intention What is an unlawful detainer? What can I do to stop this eviction? Has an answer been filed? Will this affect my credit score? What are the court hours to file?	Value User Gets From Intention
		Can a handyman working for the landlord file an unlawful detainer against me?	
		Does the court need an additional copy?	
		How much time should the landlord give me to move out if I have a year lease?	
		The landlord gave me a three day notice but refused my rent when I tried to pay. Can he do that? How can I evict a commercial tenant? What do I do if my landlord does not give me my deposit back?	
		My roommate got served with an Unlawful Detainer Complaint but it does not mention me-do I have a case against me?	
		I served a 30 day notice on my tenant but they haven't moved out-what do I do?	
	Name Change Change an Adult's Name		http://www.courts.ca.gov/selfhelp-namechange.htm http://www.courts.ca.gov/1051.htm

User Types	Topic/Domains Change a Child's Name	User Intention	Value User Gets From Intention http://www.courts.ca.gov/1052.htm
	Forms		http://www.courts.ca.gov/1053.htm
	FAQs		http://www.courts.ca.gov/1054.htm
	Questions that may be asked		
		Can I change the child's name without the other parent's permission? What court do I need to file my petition to change name in? How much does it cost to file for name change? Can I change my name online? How do I change my middle name to my maiden name? I want to change my child's name and the father isn't on the birth certificate. Do I have to get his permission? I want to add a last name to my child's last name and I need help. I have some questions about the name	

change process.

User Types Topic/Domains User Intention Hi, I just received my "proof of publication" as part of my name change process, but noticed that there was a typo on the form. I'm running the ad again, but it has to be in a the original court documents. Is this a problem? Where at the San Diego courthouse do I file my name change appeal? I am filling out the paperwork to change a name. The name my mother in law used all her life is different from the birth certificate name. On the form do I put her birth certificate name and maiden name as her present name? Then do I put her married on the proposed name? The problem is her birth certificate name is different from the name she has used al her life and she can't get an ID. Need to obtain record of name change and adult and it's for my mother who currently lives in another state I would like to remove my last name on my child name and just leave my husband last name, but I know how to fill out the paper

Value User Gets From Intention

different publication than the one I wrote on

work

how do I change name if I don't live in ca anymore

Is there a fee to file form FL 395?

User Types	Topic/Domains	User Intention	Value User Gets From Intention
		I am looking to change my name back to my maiden name. My divorce was finalized in 2007. Am I still eligible to submit a FL-395? Also the website says to submit the judgement on form FL-190 but my judgement is form FL-180 did that change and will this work? Thanks!	
		I am wondering if I file for a name change, would I have to submit the forms in person or can I have someone file it for me if I cannot get the time off work?	
		Do we have to bring copies of the newspaper where we publish the Order to Show cause for Change of Name to court?	
		I am changing my name to conform to my gender identity. is there anything I need to be aware of and how can I keep from being	

discriminated against? thank you

User Types

Topic/Domains

User Intention

Value User Gets From Intention

I am trying to change my last name and my son's last name to my mother's last name (from my father's). Paternity has *not* been established for my son, though there is an open case from the County for it since 2013. Do I need to notify that person of the name change or file a due diligence on attempting to locate him? As far as I know, he does not know my son's name as it is currently and had had no contact with me since prior to my son's birth.

I want to get my maiden name back. I am a widow & have been for 9 years.

My husband changed his name legally when he was 18. He is 51 now and does not have any paperwork which shows his old name and new name. He would like to get a passport. How can he get the paperwork showing completed name change from decades ago?

My question is about a name change that I processed in 1986 in the state of New Mexico. I have the court order but the order is in my stepfathers name and my birth certificate is in my mothers maiden name. I would like to get a passport for travel but they are requesting the passport in my I'd like to change my name officially and am daunted by the process

APPENDIX B: US	ER STORIES	
User Types	Topic/Domains	User Intention
		I'm interested in changing my middle and last name: middle name (as a chosen name to represent my identity) and surname (to match my partners). I live in Alameda County and I was hoping to get a list of the newspapers I have to post in and how much that costs. Thanks
		I was at court last Friday at 11:30 for a name change for my son who is a minor (16 years old) the judge asked me and his father to come back at 2pm. We came back he heard both sides he asked we come this Friday 10/26 with my son at 2pm. I just received the court paperwork but it says 11:30 and my child is not on it. I am confused on when to come
		doing a minor name change other person is out of state do I still post in my news paper
		I am transgender, I had my name legally changed in Oklahoma. I am now living back in CA and want to get my birth certificate to

Value User Gets From Intention

nd my name legally a. I am now living back my birth certificate to show my new name and my true gender. Which form/s do I need?

HI I wanted to change my son's last name, but we can't locate his father. Child support has even closed our case, because he lives outside of the United States. How does the process work if I am unable to locate him?

User Types Topic/Domains User Intention Value User Gets From Intention I want to ask about what newspapers are available for posting my petition. I am looking for a budget (reasonable price) newspaper because I am petitioning with a fee waiver. I am in the Fresno area and would appreciate your assistance. Hi, my ex-husband was not a biological father of my child, but when my son was born, his last name was on his birth certificate. We were divorced in 2008, and on the court papers, it states that he is not the father of my child. How can I change my son's last name, without involving my exhusband during this process? Hi, if I changed my name with SSA due to getting married recently, but now have changed my mind and would like to keep my original name, do I need to get a court order to change it back? Or can I just go to an SSA office to reverse it? I want to change my name due to gender identity. Do I still have to publish the change in the newspaper? The county form does not include gender identity as an option. I recently filed a petition for change of

name. My question is do I send the proof of publication in 10 days prior to court hearing or bring it to court on the day of my court

hearing

User Types

Topic/Domains

User Intention

Value User Gets From Intention

On my birth certificate I have my dads last name as my middle name and my moms last name as my last name but on My social security card, passport, license my name shows as first name and my dads name

we live in San Francisco, but court is always busy, so can we do it in San Mateo?

I am filling the form. There is a blank for case no. What should I fill out?

I was not able to get the notice published in time to make the set court date of October 25. I need to postpone the court date so I can have the notice published for the required 4 weeks.

I'm changing my name and gender marker. Per the courts.ca.gov website and my local superior court website I have obtained and filled out the relevant forms. I have the CM010, NC110, NC125, NC200, NC230, and SC2069. I wanted to verify that (a) these are all the documents I need and (b) that I filled them out correctly. I have PDF copies that I have yet to print out but are otherwise completed. (c) Do I need to also bring any particular forms of identification in order to file the forms at my local county courthouse?

User Types	Topic/Domains	User Intention	Value User Gets From Intention
		So I changed my name during the citizenship process. They just gave me a naturalization certificate with the new name. I was able to change the driver's license and SSN with that. But the banks are asking me for Name Change Decree.	
		Hello, I'd would like to check what the status is of my name change. Completed my divorce on 2/14/2018. And mailed the name change from in Aug 2018.	
		My first question is that in the online instructions, I states that come courts may require you to fill out additional local forms. Are you aware of any of these forms for Alameda County?	
		I'm helping a family complete form Nc 100 to correct name for their grandchild - they have guardianship thru county placement. Under 1 petitioner, is it the grandmothers name or child current name? I see under 5d we will list grandma.	
		I didn't change my name when I got divorced but now I want my maiden name back. How do I do that?	I
	Traffic		http://www.courts.ca.gov/selfhelp-traffic.htm
	Traffic & Ticket Basics		http://www.courts.ca.gov/8452.htm
		Basic Information	http://www.courts.ca.gov/9529.htm http://www.courts.ca.gov/9540.htm

User Types	Topic/Domains	User Intention Correctable Violations("Fix-It" Tickets)	Value User Gets From Intention
	Payment of Bail/Fines	If You Ignore Your Ticket	http://www.courts.ca.gov/9581.htm
	Daily Filles		http://www.courts.ca.gov/trafficamnesty.htm
		Basic Information	
	Traffic School	Traffic Tickets/Infractions Amnesty Program	http://www.courts.ca.gov/9410.htm
	Arraignment and Court Trial	Basic Information	http://www.courts.ca.gov/8450.htm
			http://www.courts.ca.gov/34711.htm
		Basic Information	http://www.courts.ca.gov/34713.htm
		Traffic Court Trial	http://www.courts.ca.gov/11581.htm
	Forms	Trial by Written Declaration Appeals	http://www.courts.ca.gov/1056.htm
	TOTTIS	Арреаіз	nttp.//www.courts.ca.gov/1030.htm
	FAQs		http://www.courts.ca.gov/1057.htm
	Questions They May Ask:		
		What is Traffic School? Where is the nearest Traffic School?	
		How do I know if I qualify for traffic school.	
		Can I change my court date? what is the difference between a court trial and a trial by written declaration? When is my court date? How much is my fine? How do I prove corrections? Why do I have to pay a proof of corrections fee?	

User Types	Topic/Domains	User Intention How do I pay my fine? How do I set up a payment plan? How do I setup a court trial? Can I make a payment over the phone? How do I make an online payment? My courtesy notice say's it is not mandatory to appear but the officer said it was, which one is it? Where can I make a payment in person?	Value User Gets From Intention
		Can I set up a payment plan over the phone?	
		Can I cancel or reschedule a hearing over the phone?	
		Who do I contact if I received a letter from the court that says I can do traffic school?	
		I got a ticket but never received any information in the mail. What do I do now?	
		How can I get my driver's license back? What date and time is walk-in day for traffic court? I keep getting collections notices from the court but I was not in California for the dates mentioned. What can I do to make them stop sending these? Can I pay my citation online?	
	Senior Conservatorship		http://www.courts.ca.gov/selfhelp-seniors.htm
	Conservatorship		http://www.courts.ca.gov/selfhelp-conservatorship.htm

User Types	Topic/Domains	User Intention	Value User Gets From Intention http://www.courts.ca.gov/1300.htm
		Basic Information Information for the Conservator Information for the Conservatee Forms	http://www.courts.ca.gov/1301.htm http://www.courts.ca.gov/1302.htm http://www.courts.ca.gov/1303.htm
	Questions They May Ask:	Conservatorship FAQs	
	Way / GK	I have a power of attorney for my parent, who now has dementia. Do I need a conservatorship? How do I get permission to pay the bills while I am waiting for the conservatorship hearing? Will the court appoint an attorney for the conservatee? Whose side is the investigator on? I am my child's SSI payee. Do need conservatorship of the estate?	
	Problems with Money Basics	My aging parent has dementia. Is there somewhere I can get help?	http://www.courts.ca.gov/selfhelp- problemswithmoney.htm http://www.courts.ca.gov/1061.htm
	Small Claims Cases for \$10,000 or Less	Overview	http://www.courts.ca.gov/1062.htm
	Questions They May Ask:	Basic Information	
		What do I do if the defendant does not pay the Judgment?	

User Types	Topic/Domains Limited Civil Questions They May Ask:	Basic Information Suing Someone Being Sued Before the Trial Prepare for Trial The Trial Collecting the Judgement Paying the Judgement Resolving the Case Out of Court When do we set hearings? What are the filing fees? When is my law and motion hearing? Am I required to file a trial brief? What is the timeline for filing a civil case management conference? What is the timeline for filing a trial readiness conference? What is the timeline for filing a mandatory settlement statement? How do I get a subpoena? Who can serve a subpoena?	Value User Gets From Intention http://www.courts.ca.gov/1064.htm http://www.courts.ca.gov/1304.htm http://www.courts.ca.gov/1305.htm http://www.courts.ca.gov/1306.htm http://www.courts.ca.gov/1307.htm http://www.courts.ca.gov/1308.htm http://www.courts.ca.gov/1309.htm http://www.courts.ca.gov/1310.htm http://www.courts.ca.gov/1311.htm
		What is the timeline to serve a subpoena?	
	Criminal Law Basics of Criminal Court	Basic Information	http://www.courts.ca.gov/selfhelp-criminallaw.htm http://www.courts.ca.gov/10214.htm

User Types	Topic/Domains	User Intention	Value User Gets From Intention
	How Criminal Cases Work	Basic Information	http://www.courts.ca.gov/1069.htm
	Cleaning Your Record	Basic Information	http://www.courts.ca.gov/1070.htm
	Forms	Basic Information	http://www.courts.ca.gov/1330.htm
	FAQS		http://www.courts.ca.gov/1071.htm
	Questions That May be Asked:		
		What day is my court date? Can I get pardoned? What time is my court date? How to get a certified copy? What is my case status? What is a case disposition? How do I get my case expunged? What requires certification? How do I file a certain petition? Whose my Public Defender? What do I do if I miss my court date? What are the court hours? Where is the jail? Do I have court today? What is my case number?	
		How can someone who is in jail in another county contact the criminal clerk?	
	Civil Appeals Basics	Can I expunge a felony?	http://www.courts.ca.gov/selfhelp-appeals.htm http://www.courts.ca.gov/12429.htm

User Types	Topic/Domains	User Intention Basic Information about Civil Appeals Basic Information About Appeals Appellate Courts	Value User Gets From Intention http://www.courts.ca.gov/12430.htm http://www.courts.ca.gov/12431.htm
	Options to Appealing	Appeals Process	http://www.courts.ca.gov/5804.htm
	Steps to Appeal	Appeal Options	http://www.courts.ca.gov/8546.htm http://www.courts.ca.gov/12428.htm
		Basic Overview of Appeal Steps	http://www.courts.ca.gov/12426.htm
		Filing the Notice of Appeal	http://www.courts.ca.gov/12425.htm
		Abandonment or Settlement	http://www.courts.ca.gov/12424.htm
		Waiver of Fees	http://www.courts.ca.gov/12423.htm
		Designating the Record	http://www.courts.ca.gov/12422.htm
		Civil Case Information Sheet	http://www.courts.ca.gov/12421.htm
		Briefs	http://www.courts.ca.gov/12420.htm
		Oral Argument	
	After the Appeal	The Courts Decision	http://www.courts.ca.gov/8547.htm
			http://www.courts.ca.gov/12419.htm
		What to Do After Appeal	
	Forms	Petition for Rehearing	http://www.courts.ca.gov/8545.htm
	FAQs		http://www.courts.ca.gov/8551.htm
	Questions They		
	May Ask:		
	Gender Change		http://www.courts.ca.gov/genderchange.htm
	Gender Change Forms		http://www.courts.ca.gov/11183.htm
		Basic Information	
	Questions They May Ask:	Basic Information	

User Types	Topic/Domains	User Intention	Value User Gets From Intention
	Wills, Estates and Probate		http://www.courts.ca.gov/8865.htm
	Affidavit for Transfer of Personal Property of 150,000 or Less		http://www.courts.ca.gov/10440.htm
		wildt die wills, Estates, dilu riobates ridte	
	Questions They May Ask:	Basic Overview	
		My father-in-law passed away this summer and there is a pending probate matter. My husband and I live in Colorado and have been told that he has to file a Request for Notification himself because the estate's Help filing Petition for Final Distribution and Order to pay creditors and terminate Estate upon doing so.	
General Public/Citizens		My mom died and left a few thousand dollars in a bank account. How can I get it?	
Jurors	Questions They may Ask:		
		Can I be excused from jury duty? How do I postpone jury duty? can I postpone on behalf of my child? What is jury duty? What is a trial? Will I be reimbursed for my time? What is a jury summons?	

User Types	Topic/Domains	User Intention What happens if I miss my jury duty summons date?	Value User Gets From Intention
		I am a college student, can I be excused?	
Compliance	Questions They May Ask:	My mom got a notice for Jury duty but she died-what should I do?	
Grand Jury	Questions They May Ask:	What if I cant pay my fine? What happens if I miss a payment? What happens if it goes to collections? What do I do about my citation? What if I cant afford my payments?	
		How do I resign? What are the chances of me getting off the alternate list? Is a Grand Jury invite like a summons?	
		What does being on the Grand Jury Mean?	
Court Services	Questions They May Ask:	What are the commitments of being on a grand jury?	
Traffic Citations		Where do I get a copy of my marriage, birth, or death certificate/ Where do I register to vote? Are there any warrants for my arrest?	LA Gina Avatar

ID Category	Func/Non unc/Conte nt		Detailed Description	Include in RFP Demo		Ch / Evaluation	C Criteria Values	Criteria Notes
1 Integration	F	Chatbot must be able to ingest information from different data sources and types.	The chatbot solutions must be able to ingest information from different data sources and types like websites, databases, structured and nonstructured files, etc.	Y	Optional	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
2 Machine Learning/AI	F	Chatbot must be able to provide relevant information to users.	Chatbot should provide relevant information to the request, not just provide links to resources.	Υ	Mandatory	Y Grading Scale 1-5 (ease of training)	1 - Impossible to train 2 - Requires HEAVY investment of SME to train 3 - Requires MODERATE investment of SMEs 4 - Requires LITTLE investment of SMEs 5 - Requires NO investiment of SMEs to train	Little investment = less than 25% Moderate = 25-50% Heavy = greater than 50%
3 Usability/User Experience	F	Chatbot should ask questions to help refine the request	Chatbot should ask probing questions to help identify and refine the request	Υ	Mandatory	Y Grading Scale 1-5	Not Available Supports limited sources Requires 3rd Party Integration Supports all major sources with customization Supports all major sources out of the Box without customization	
4 Usability/User Experience	С	Provide waypoint directions to judicial resources (branch and courts)	Chatbot shall provide waypoint information and directions for judicial resources, such as courthouses, self-help centers, parking, etc.	Y	Mandatory	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
5 Usability/User Experience	F	Support multiple languages	The chatbot should be available in multiple languages both verbally and in text responses.	Y	Mandatory	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources without of the Box without customization	
6 Usability/User Experience	F	Recognize returning users	The chatbot should be able to identify returning users to aid in identifying service needs and following up on questions.	Y	Optional	Y Binary		Should also need to be able to forget someone and clear the session
7 Usability/User Experience	F	Handoff	Chatbot must be able to interface with individual counties and hand off the chat to the relevant county at the correct time. If the county has chat ability, that handoff should be invisible to the user. All data provided to the initial chatbot should be passed forward so there is no replication of questions/answers. If the relevant county has the ability, data/answers from the chatbot should be passed in a useful way, such as filling in forms or doing a case lookup.	Y	Optional	Y Grading Scale 1-5	Not Available Supports limited sources Requires 3rd Party Integration Supports all major sources with customization Supports all major sources without of the Box without customization	

D Category	Func/NonF unc/Conte nt		Detailed Description	Include in RFP Demo	Mandatory/	Ch / Evaluation	C Criteria Values	Criteria Notes
8 Usability/User Experience	F		User should be offered an email with full text of the chat so that the user can have their questions and chat answers as a reference/resource (i.e. where to go to file something, what forms may be needed, etc.)	Y	Optional	Y Binary		
10 Accessibility	N	Accessible via internet browsers	The chatbot should be accessible via internet browsers. Should support the top browsers (Internet Explorer/Edge, Chrome, Firefox & Safari). Version support shall cover the	Υ	Mandatory	Y Binary		
11 Compliance	N	of the Americans with Disabilities Act	The chatbot must comply with Title II, section 508 of the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973 to require federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities.	N	Mandatory	Y Binary		
12 Accessibility	F	Accessible via mobile devices	The chatbot shall be accessed via mobile devices operating on the iOS and Android OS.	Y	Mandatory	Y Binary		
13 Compliance	N	The chatbot must comply with the current version of the Web Content Accessibility Guidelines (WCAG).	The Web Content Accessibility Guidelines (WCAG) are part of a series of web accessibility guidelines published by the Web Accessibility Initiative (WAI) of the World Wide Web Consortium (W3C), the main international standards organization for the internet.	N	Mandatory	Y Grading Scale 1-5	1 - Does not meet 2 - Meets 25% 3 - Meets 50% 4 - Meets 75% 5 - Meets 100%	
14 Compliance	N	The chatbot shall be secure and meet the guidelines set forth in the NIST SP800-53 standards.	NIST Special Publication 800-53 provides a catalog of security controls for all U.S. federal information systems except those related to national security. It is published by the National Institute of Standards and Technology, which is a non-regulatory agency of the United States Department of Commerce.	Y	Mandatory	Y Binary		
15 Machine Learning/AI	С	Access to forms	Chatbot shall provide links to online forms	Υ	Mandatory	Y Grading Scale 1-5 (ease of training)	1 - Impossible to train 2 - Requires HEAVY investment of SME to train 3 - Requires MODERATE investment of SMEs 4 - Requires LITTLE investment of SMEs 5 - Requires NO investiment of SMEs to train	Little investment = less than 25% Moderate = 25-50% Heavy = greater than 50%
16 Security	N	Secure communication	The chatbot must support a secure communication channel to protect communications and document transfers.	Y	Mandatory	Y Binary		

ID Category	Func/NonF unc/Conte nt		Detailed Description	Include in RFP Demo		Ch / Evaluation	C Criteria Values	Criteria Notes
17 Usability/User Experience	F	Chatbot Transaction	The chatbot should offer services beyond information by providing either a link (a URL) or online, automated services to complete transactions. For example, jurors may need information but may also need to complete transactions (reporting instructions, postponement, etc.) that should be able to be completed as part of the session.	Y	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
18 Usability/User Experience	F	Self-Help Appointment	Chatbot must link to certain self-help websites (calendar systemsame as #24)	Y	Optional	Y Grading Scale 1-5 (ease of training)	1 - Impossible to train 2 - Requires HEAVY investment of SME to train 3 - Requires MODERATE investment of SMEs 4 - Requires LITTLE investment of SMEs 5 - Requires NO investiment of SMEs to	
19 Usability/User Experience	С	Court Services	The Chatbot must direct the user to the appropriate location to find the answers to the user's questions	Y	Mandatory	Y Grading Scale 1-5	1 - Basic Information Supplied 3 - Provides limited assistances 5 - Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
20 Usability/User Experience	С	Paying Fines Online	Chatbot must be able to direct user to the correct online site to pay fines	N	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
21 Usability/User Experience	С	Hours of Operation	Chatbot must direct user to the correct location on the correct court website or display the correct hours of operation	Y	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
22 Usability/User Experience	С	Court Interpreter	Chatbot must provide correct and relevant information pertaining to court interpreters and locate and display the process to acquire the services of a court interpreter	N	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
23 Usability/User Experience	С	ADA	Chatbot must provide information about the court's duty to meet ADA requirements and to provide access to any forms necessary to ask for accommodations.	N	Mandatory	Y Binary		
24 Usability/User Experience	F	Calendars	Chatbot must identify the customer's need then locate and retrieve the correct information about the hearing or other event to which the customer is referring.	Y	Optional	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
25 Usability/User Experience	С	Referrals to resources outside of the court	The chatbot must identify the need the customer is expressing and then locate and retrieve information about resources (such as the law library or domestic violence shelter) that are available to assist the customer with their identified issue.	Y	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	

D Category	Func/Nonl unc/Conte nt		Detailed Description	Include in RFP Demo		On / Evaluation	C Criteria Values	Criteria Notes
26 Usability/User Experience	С	E-filing	The chatbot must provide information, including links to providers, about the e-filing process.	Y	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
27 Usability/User Experience	С	Service of Process	The chatbot must determine the case type and service of process requirements for the action, then direct the individual on the correct procedure.	N	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
28 Usability/User Experience	С	Traffic School	The chatbot must provide the user with information about local traffic schools and the requirements (like fees) to attend.	N	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
29 Usability/User Experience	F	Appearance	The chatbot should determine, based on case type, whether the user must make a court appearance.	N	Optional	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
30 Usability/User Experience	F	Jury Service	The chatbot should provide information about the user's current jury duty service (such as date of impending service) and also provide information about how to change or obtain a waiver for service.	N	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
31 Usability/User Experience	С	Missed payment	The chatbot should provide information about user debt to the court, including information about how to rectify the problem when there has been a missed payment.	N	Optional	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
32 Usability/User Experience	С	Grand Jury	The chatbot should provide information about how to serve on the grand jury.	N	Mandatory	Y Grading Scale 1-5	Basic Information Supplied Provides limited assistances Provides advanced assistance to whole conversation (info, form filling, set appointments, etc)	
33 Security	N	Privacy Information Protection	The chatbot should not retain or record any personal identifiable information (i.e., SSN, address locations, driver's licenses, etc.)	Υ	Mandatory	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
34 Operational	N	Chatbot Availability	The chatbot should be available 24/7 x365		Mandatory	N Grading Scale 1-5	1 - Does not meet 2 - Meets 25% 3 - Meets 50% 4 - Meets 75% 5 - Meets 100%	
35 Security	N	Encrypted storage	Data at rest shall be encrypted		Mandatory	Y Grading Scale 1-5	Not Available Supports limited sources Requires 3rd Party Integration Supports all major sources with customization Supports all major sources out of the Box without customization	

ID Category	Func/NonF unc/Conte nt		Detailed Description	Include in RFP Demo	Mandatory/0	Oh / Evaluation	C Criteria Values	Criteria Notes
36 Operational	N	Business Continuity and Disaster Recovery	The chatbot service must be designed to provide continuation service in the event of equipment failure		Mandatory	Y Grading Scale 1-5	1 - Does not meet 2 - Meets 25% 3 - Meets 50% 4 - Meets 75% 5 - Meets 100%	
37 Infrastructure/Hosting	N	Hosting	Chatbot services shall be hosted in a FedRAMP (moderated) certified data center		Mandatory	Y Grading Scale 1-5	1 - Does not meet3 - Meets expectations5 - Exceeds expectations	Exceeds expectations is when DC is FedRAMP (high) certified
38 Policy	N	Information Sharing	Vendor shall not share any chatbot information (logs, knowledge bases, etc.) with partners or 3rd party vendors without authorized consent.		Mandatory	N Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	Exceeds = proactive services to ensure info is not shared without consent. For example: Provide
39 Operational	N	Alerts and Monitoring	Solution shall be monitored 24/7 for system availability to ensure it meets the SLA.		Mandatory	Y Grading Scale 1-5	1 - Does not meet3 - Meets expectations5 - Exceeds expectations	
40 BC/DR	N	Outage Notification	Solution shall send out an alert and notification to a distribution list based on threshold rules		Mandatory	Y Grading Scale 1-5	1 - Does not meet3 - Meets expectations5 - Exceeds expectations	
41 Operational	F	Configuration	Chatbot solution shall be configurable to support different usage types	N	Mandatory	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	Able to support multiple knowledge domains from potentially different vendors and chatbots services
42 Operational	F	Delegated Administration	Chatbot solution shall support delegated administration	Y	Mandatory	Y Grading Scale 1-5	1 - Does not meet3 - Meets expectations5 - Exceeds expectations	
43 Operational	F	Support RBAC Model	The chatbot solution shall support a Role Based Access Control Model	Y	Mandatory	Y Grading Scale 1-5	1 - Does not meet3 - Meets expectations5 - Exceeds expectations	
44 Compliance	N	Non-US authorized operators and administrators	System shall not a) perform any of its obligations from locations or using employees, contractors and/or agents situated outside the United States, or b) directly or indirectly (including through the use of subcontractors) store any Data outside the United States, nor will the Contractor allow any Data to be accessed by Contractor's employees, contractors and/or agents from locations outside the United States, without prior written consent of the JCC.		Mandatory	Y Binary		

ID Category	Func/NonF unc/Conte nt		Detailed Description	Include in RFP Demo		Th / Evaluation	C Criteria Values	Criteria Notes
45 Education/Training	N	Training for knowledge domain managers	Provide training for users who will be managing and monitoring chatbot knowledge and responses		Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	
46 Usability/User Experience	N	Intuitive Interface for General Public	The chatbot interface should be intuitive to the general public so no training is required.		Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	
47 Usability/User Experience	F	Session Timeout	The chatbot must automatically end session after X (configurable) minutes of inactivity. It shall provide notice to end user when this occurs.	Y	Mandatory	Y Grading Scale 1-5	- Capability does not exist - Has capability but not configurable - Has capability is configurable	
48 Reporting/Metrics	F	Foundation Activity Reporting	Reporting shall include information like number of transactions, sessions, availability, downtime, etc.	Y	Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	Define what is the minimum needed activity reporting
49 Reporting/Metrics	N	Metrics	Metrics for measuring success of each chatbot project or user story. How many people using chatbot for each purpose and is the user number rising? Are there return visits? Are call and/or email volumes reducing? Are chatbot users transitioning from chatbot to assisted chat or getting lost Analyze the unproductive interactions.		Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	What level of analytics are provided? Need to define what the minimum analytics are for meets expectations
50 Reporting/Metrics	F	Printable	Reports should be printable	N	Mandatory	Y Binary		
51 Usability/User Experience	F	Feedback/survey	The chatbot should inquire users to determine if the chatbot was useful, and/or areas for improvement.	Υ	Mandatory	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
52 BC/DR	N	Recovery Point Objectives	The solution shall have a Recovery Point Objective (RPO) of no more than X mins (X TBD)		Mandatory	Y Grading Scale 1-5	1 - Does not meet3 - Meets expectations5 - Exceeds expectations	Meets expectations is equal to X mins Exceeds = 50% less

D Category	Func/NonF unc/Conte nt		Detailed Description	Include in RFP Demo		Oh / Evaluation	C Criteria Values	Criteria Notes
53 BC/DR	N	Recovery Time Objectives	The solution shall have a Recovery Time to Operations (RTO) of no more than Y hour (Y TBD)		Mandatory	Y Grading Scale 1-5	1 - Does not meet3 - Meets expectations5 - Exceeds expectations	Meets expectations is equal to Y Hours Exceeds = 50% less than Y
54 BC/DR	N	Outage Root Cause Analysis	In the event of an outage, provide report on incident and root cause analysis+[@[Detailed Description]].		Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	Meets expectations = provides high basic root cause (Example: RCA = server/component failed) Exceeds = provide detail analysis/report Example: Server failed due to out of memory and/or storage
55 Education/Training	N	Online Documention	Solution has online training and support materials are available to chatbot support users, developers, and admininstrators.		Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	
56 Technical Support	N	Help Desk	Provide help desk support for end users (Redirect to live agent).		Optional	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
57 Policy	N	Data Ownership	Data is owned by Courts of CA. If needed, describe how data may be exported or transferred to another provider.		Mandatory	N Binary		
58 Infrastructure/Hosting	N	Support Production/Lower Environments	Must be able to support production and lower environments		Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	Meets = production and 1 lower environment Exceeds = greater than 1 non prod environment
59 Audit/Logging	N	Logging	The solution maintains logs for all actions and operations for auditing, tracking, analysis and debugging. Users, including Administrators, cannot modify the logs.		Mandatory	Y Grading Scale 1-5	1 - Does not meet 3 - Meets expectations 5 - Exceeds expectations	

D Category	Func/Nonl unc/Conte nt		Detailed Description	Include in RFP Demo		Ch / Evaluation	C Criteria Values	Criteria Notes
60 Usability/User Experience	F	Natural Language Processing	NLP enhances conversational experience to gain more accurate responses. It uses knowledge of sentence structure, idioms, slang, abbreviations, and machine learned pattern recognition to try match "intent" like a human being. Can help to prioritize unsatisfied or angry customers and connect them to humans.	Y	Mandatory	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
61 Usability/User Experience	F	Biometrics	Ability to identify proof through voice or other means?	Υ	Optional	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the	
62 Usability/User Experience	F	Integration	Able to integrate with calendaring systems for making self-help appointments (same as self-help appointments and calendaring)	Y	Optional	Y Grading Scale 1-5	Not Available Supports limited sources Requires 3rd Party Integration Supports all major sources with customization Supports all major sources out of the Box without customization	Yes
63 Usability/User Experience	F	Machine Learning/Al	Ability to consume prior chatbot conversations, identify and develop improve responses	Υ	Mandatory	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
64 Security	F	Authentication	Chatbot should be able to integrated with an authentication service such as Azure AD	Y	Optional	Y Grading Scale 1-5	1 - Not Available 2 - Supports limited sources 3 - Requires 3rd Party Integration 4 - Supports all major sources with customization 5 - Supports all major sources out of the Box without customization	
65 Administrative	N	Operational Administration	Level of expertise required to operate and manage the chatbot platform		Mandatory	Grading Scale 1-5	Requires HIGH level of expertise/training Requires MODERATE level of expertise/training Requires LOW level of expertise/training	can learn from online documentation
66 Maintability	F	Machine Learning/AI	Level of automation required to maintain and train chatbots	Y	Mandatory	Grading Scale 1-5	Not Available Requires 3rd Party Integration Out of the Box with Limited Automation unable to integrate with 3rd party Out of the Box with Limited Automation requiring 3rd Party integration to meet needs Out of the Box - Full Automation	What types or automation tools are included

Name	Descriptions	How to Measure	Target	Success Factors
Accuracy	Acquiring users is one thing,	Q: How to measure this?		
	but making sure the users	More for search results?		
	utilize the bot for its intended			
	purpose is key. This is where			
	the activation metric comes in.			
	Does the user respond to your			
	bot's opening message with			
	relevant questions? If not, how			
	can you adjust the message to			
	make sure users understand			
	how to use the bot?			
Activation Rate				
Chat completed %		Percentage of total completed/total		In Year 1, More
	that were completed	sessions		than 80% of chat
	successfully			session successful
				complete
Chat dropped %	Percentage of chat sessions	Chat dropped sessions/chat total		
	that were dropped	sessions		
Chat dropped	Number of chats sessions that			
	were timed out or lost			
	connection			
Chat Duration	Capture the duration of a chat	Measure in time (in seconds). Min,		
	conversation	Max, and Average		
Chat missed %				In Year 1, Less
				than 10% missed
				session
Chats completed Total	Total number of chat sessions	This is a count of the total number		
	completed successfully	of chat session successfully		
		completed in a day, week, month,		
		etc.		

Name	Descriptions	How to Measure	Target	Success Factors
Chats missed	Total number of chat sessions			
	opened and ended			
	before active conversation was			
	started			
Chats Rating	Capture UX of the chat	Measure UX rating in number of		Chat Rating of
	experience (1 to 5 stars)	stars		Average of 3.5 for
				year 1 with goal of 4
Fall Back Rate (FBR)	No chatbot is perfect. There	Number of sessions that transfer to		
	are fallbacks in almost every	a live chat or provide contact		
	chatbot at some point. The	information		
	rate of fallback of a chatbot can	(if the conversation has many steps		
	be in different ways, the KPI	and results in providing the user		
	metrics divide these fallbacks	with either a livechat option or		
	into different categories and	providing alternative contact		
	the following are the chatbot	information, this would be counted		
	related ones:	as a fall back)		
	- Rate of Confusion	The Fall back rate will be the		
	- Session Length/Steps per	percentage of the number of		
	conversation	conversation that concludes with		
	- Session Length/Time spent	one of the previously describe		
	per Session	outcomes.		
Feedback comments				
Number of new users using	Track number of new users?	Q: How? by different IP addresses?		
bots daily, weekly, monthly		MAC Addresses? Sessions?		
		Collect this information for analytics.		

Name	Descriptions	How to Measure	Target	Success Factors
Number of Volunteer Users	As users of chatbots, we know	Number of self initiate chat sessions.		50% of sessions
(organic users)	that once we use a chatbot in a	User accesses chatbot without		access chatbots
	messaging platform, we get	being prompted		without being
	notifications from those			nudged
	chatbots reminding us to chat			
	again and again. (which is			
	sometimes a little bit			
	annoying). But if your clients			
	come and use your chatbot,			
	without even getting notified,			
	that is a really countable			
	measurement. This means that			
	the specific user comes in with			
	a real purpose.			
	It's super-annoying when a			
	chatbot keeps popping up,			
	begging us to use it. So if users			
	come back of their own accord			
	without being prompted, that's			
	a great sign — and a metric			
	worth counting. 'Organic' users			
	come in with a purpose; you			
	can measure their number			
	through messages initiated by			
	the user, not the bot.			

Name	Descriptions	How to Measure	Target	Success Factors
Pain Points	It will be important to	Q: Can this be measured? How?		
	understand where things get	This is more for analysis to identify		
	hairy with your bot's user	where sessions are behind dropped		
	experience. You could chalk			
	slow adoption up to users'			
	apprehension to change, but			
	there will likely be at least a			
	few bugs you can fix to make			
	the process run more smoothly			
	following your launch date.			
Rate of Confusion	Confusion Rate = Number of	Percentage of Fall Backs/Total		
	times the chatbot had to	Sessions (Daily, Weekly, Monthly,		
	fallback / Total Messages Sent	Quarterly, etc.)		
Response Time	Time it took for the initiation of	Measure in time (in seconds). Min,	For chatbot	95% of all chat
	conversation	Max, and Average	less than 2 seconds	sessions respond within 2 seconds
Session Length/Steps per conversation	Captures number of steps per conversation	Number of steps per domain		
Session Length/Time spent per	Captures the duration of a			
Session	session			
Total Chats served	Total number of chat sessions			
	opened			
Wait time (missed)	Same as chat missed			
Wait time (served)	For LiveChat, this is the wait			
	time before an agent becomes			
	available			

APPENDIX E: EXAMPLE OF CHATBOT DISCLOSURE, PRIVACY POLICY, AND DISCLAIMER

Draft Disclosure, Privacy Policy, and Disclaimers

Business and Professions Code section 17940 requires that the bot disclose that it is a bot when it delivers service. The suggested disclosure is just, "Hi! I am a bot."

DISCLOSURE STATEMENT:

"Hi! I am a bot."

PRIVACY STATEMENT:

We do not collect, nor do we retain, any personal information or data. If there are any changes to this policy, such changes will be posted on the Judicial Council of California's website. Third parties are prohibited from tracking and/or collecting any information or other data about any person through this bot, website, and/or any app affiliated with the Judicial Council of California.

DISCLAIMER STATEMENT:

The (Judicial Council of California website or wherever the bot is located) and the documents, forms, and/or information provided are provided conditioned upon your acceptance of these disclaimers and/or terms, and any other disclaimers and/or terms that we may provide.

The purpose of this (site, chat, etc.) is to provide legal information to the public. We do not and will not represent any person or party in any case, action, or controversy. We do not give legal advice. The information provided herein is general in nature. There may be additional forms and rules that are local to your court or jurisdiction in which you or your case are located.

This (website, app, chatbot, etc.) and the information provided herein is not intended as legal advice. You should consult with an attorney to receive any legal advice about your issue or case.

We disclaim any and all liability and make no warranties about any of the forms, documents, or information contained herein. We will have no responsibility or assume any liability for any claim of loss, injury, or damage resulting from your use of the forms, documents, or information provided herein.

APPENDIX F: EXAMPLE OF INTERNAL POLICIES

- 1. The chatbot shall have a warning displayed to all users of the nature of the technology being used. Specifically, that warning should include that the interaction is with a chatbot and that the chatbot may rely on other chatbots for information.
- 2. The chatbot shall provide the users an opportunity to erase their data at the end of the session.
- 3. The chatbot shall have a human point of contact whereby inappropriate information or actions by the chatbot may be reported for investigation and corrective action. Access to that point of contact should be available by hyperlink on the chatbot interface.
- 4. The point of contact shall have means readily available to suspend the chatbot's operation.
- 5. The chatbot should have a list of words and phrases it will not use. In the court environment, people may come for concerns about discrimination, including use of racial epithets against those persons. The chatbot shall be instructed on the appropriate use of that information. Moreover, the chatbot shall not use those words when responding to a user.
- 6. The chatbot should not provide any personal information. Additionally, it should only take the personal information necessary to identify a problem. It should, under no circumstances, take personal identifying information including, but not limited to, driver's license numbers, dates of birth, or social security numbers.
- 7. The chatbot shall be programmed to conform with Isaac Asimov's three laws: A robot may not injure a human being or, through inaction, allow a human being to come to harm. A robot must obey orders given it by human beings except where such orders would conflict with the First Law. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

REFERENCES

https://www.geekwire.com/2018/will-rogue-ai-chatbots-emerge-2019/

https://www.alphr.com/technology/1006395/microsoft-s-chatbot-zo-has-gone-rogue-and-is-slating-windows

https://www.informationweek.com/iot/google-developing-panic-button-to-kill-rogue-ai/d/d-id/1325783

https://www.socialmedialawbulletin.com/2017/06/chatbots-legal-issues/

 $\frac{https://www.ibm.com/blogs/watson/2017/10/the-code-of-ethics-for-ai-and-chatbots-that-every-brand-should-follow/$

https://adtekr.com/advertising/hey-chatbot-what-are-the-legal-issues/

https://www.designnews.com/electronics-test/how-can-engineers-stop-ai-going-

rogue/54158381258137

https://chatbotsmagazine.com/preventing-bot-rot-how-to-keep-your-chatbot-healthy-18b6724e47a3

APPENDIX G: EXAMPLE OF RECOMMENDED APPLICABLE USE POLICY VIA WEB GOVERNANCE

An Applicable Use Policy dictates the parameters of chatbot interactions in terms of the type of information provided, the areas of law that would be addressed, and that the chatbot does not create an attorney/client relationship. Importantly, the policy should state what the platform cannot be used for. Examples of Applicable Use Policy content is as follows:

- 1. Does not provide legal advice
- 2. Does not violate confidentiality
- 3. Does not create an attorney/client relationship
- 4. Not used for criminal cases
- 5. Does not create a liable situation for the courts and the branch

Further discussion is needed around these areas with the input of appropriate Subject Matter Experts.