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USER INTERFACE &
USER EXPERIENCE
EVALUATION of
INDIAN HIGH COURT
WEBSITES





# Acknowledgements

This paper is an independent, non-commissioned piece of academic work.

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This report would not have been possible without the support of Sandhya PR, Siddharth Mandrekar Rao, Soham Ghosh in collecting responses to the surveys conducted under this study.

The authors would like to thank and appreciate Maansi Gupta and Deepak Sharma for their support and inputs all through the data collection, study and the report. The authors would like to thank Surya Prakash B.S. for his guidance and review of this report. The authors would also like to thank Leah Verghese for reviewing the report and sharing valuable feedback.

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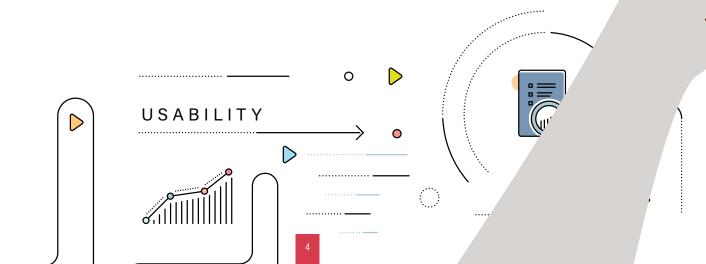




# Executive Summary

And the country's advancement in technology make it imperative for the public to easily access information regarding the judiciary. The current work analyses the accessibility and availability of this information by conducting a detailed study on the User Interface (UI) and User Experience (UX) of select High Court websites. The study evaluates the websites of six High Courts of India: Bombay, Calcutta, Delhi, Karnataka, Madhya Pradesh, and Madras.

The evaluation consists of three elements: a user experience test; a task-based usability test; and a heuristic evaluation of the websites. The first element determines whether the websites are structured 'intuitively' enough for users, the second element tests the usability of the websites, and the third element determines whether the websites are in accordance with standard Interaction Design Principles (IDPs). Surveys were conducted for evaluating the first two elements and the third element was evaluated by assessing each website against standard IDPs. Key findings from each element are provided below:



# **User Experience Test**

81%

Most respondents (81%) said that the accessibility of the websites met their expectations.



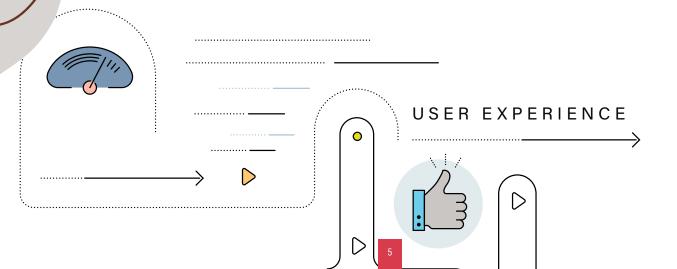
Most users felt that the quantity and variety of information provided on these websites met their expectations.

82%

Most respondents (82%) felt that the speed of the website for the High Court of Delhi either met or exceeded their expectations. A large portion of respondents did not feel that the speed of the websites for the High Court of Bombay (35%) and High Court of Karnataka (36%) met their expectations.



In terms of architecture, lack of user-friendly and advanced search tools on the website, multiple pieces of scrolling content, and cluttered navigation bars made users dissatisfied with website structures.



# Task-based usability test:

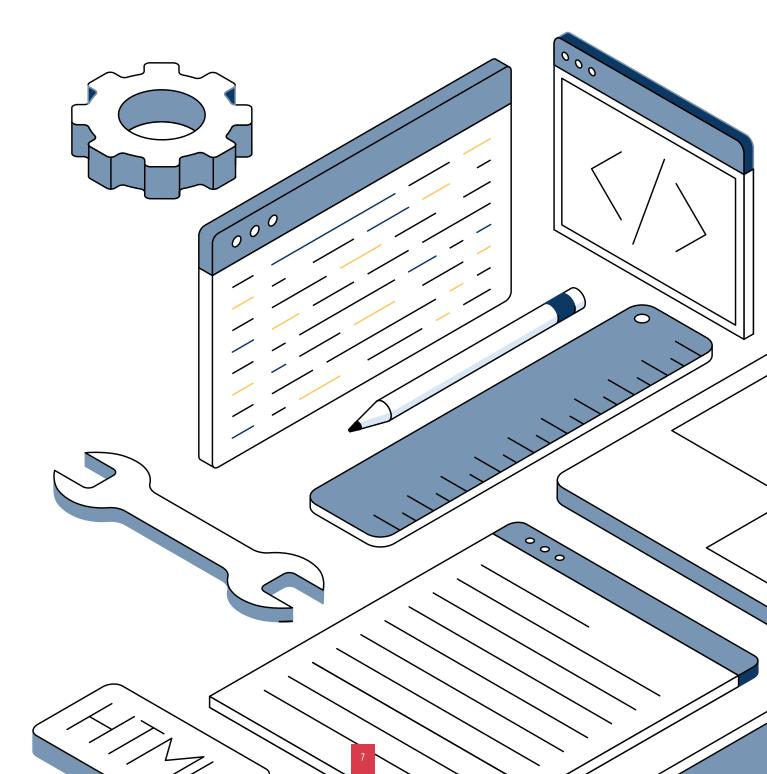
- Most respondents were able to successfully complete tasks related to finding information on court notices, circulars, and notifications. They were also able to complete tasks associated with finding information about the court, barring difficulties faced in finding information related to the Right to Information Act, 2005 (RTI).
- 2. Fewer respondents successfully completed tasks related to finding information about cases in the High Courts. Not all websites provided abbreviations and full forms of case types which made it difficult for users to find details of particular cases.
- Websites with multiple navigation bars and complex non-intuitive structures made it difficult for users to perform certain tasks as they were unable to effectively identify relevant sections of the website for the tasks.
- Not all websites clearly laid out the names, designations, and contact details of Public Information Officers. Similarly, users found it difficult to obtain contact details of the court on some High Court websites.

# **Heuristic evaluation:**

 Understanding the language used on the websites plays a vital role in improving its

- usability. However, none of the wesbites provide clickable explainers for technical words, and most of them do not provide the option to change the language used on the website.
- 2. All the websites contain features that aid in recognition (rather than recall). However, only two of the six websites provide a navigation path to indicate how users reached a particular page, and none of them provide auto-filled suggestions for users searching for any information on the website.
- Some of the areas where all the High Court websites performed well include assisting users who forgot their passwords, alerting users about an incorrect CAPTCHA, notifying users that no cases were found based on the information they submitted, and not using technical jargon while pointing out errors.
- 4. While 5 out of the 6 websites provided a sitemap, the High Court of Calcutta's website did not provide one. Barring the website for the High Court of Delhi, none of the other 5 websites provide a search function on every page.

The results of these elements have been analysed separately as well as together to suggest improvements and make recommendations for each High Court. These findings can help the courts improve their websites and enhance the experience of users.



Phase III of the eCourts Project is about to be launched soon, and the Supreme Court is currently reviewing its earlier phases and seeking inputs regarding the way forward. This provides an opportunity to review how technology can enable access to justice and improve access to information. High Court websites cater to multiple stakeholders, including litigants, lawyers, judges, law students, researchers, people applying for tenders or contracts, and citizens. These stakeholders use these websites to access various types of information, including:

- 1. Information regarding cases;
- 2. General information (e.g., court history, photographs, contact information)
- 3. Notifications and circulars (e.g., roster changes); and
- 4. Court business (e.g., recruitment, tenders).

The accessibility of information and user-friendliness of each High Court website varies with its design and content. This study is aimed at improving access to information through a detailed study of the User Interface (UI) and User Experience (UX) of six select High Court websites, and suggests improvements to ensure transparency and accessibility of information for various stakeholders. The findings from the study highlight specific improvements that can be made by the select High Courts to improve their websites, and also help inform other High Courts of steps

that can be undertaken to improve their respective websites.

The study was conducted in the months of January and February 2021 and evaluates the websites of six High Courts: Bombay, Calcutta, Delhi, Karnataka, Madhya Pradesh, and Madras. These courts were selected as they broadly represent two categories, the presidency courts (Bombay, Calcutta, Madras) and newer courts that have undertaken technological initiatives (Delhi, Karnataka, Madhya Pradesh). The evaluation consists of three elements:



# User experience test

This test evaluates how intuitively the websites are structured for users.



## Task-based usability test

This test evaluates how users completed the tasks on the website.



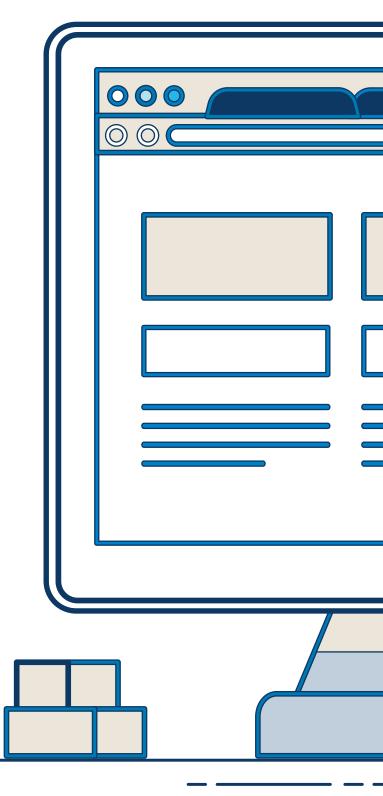
### **Heuristic evaluation**

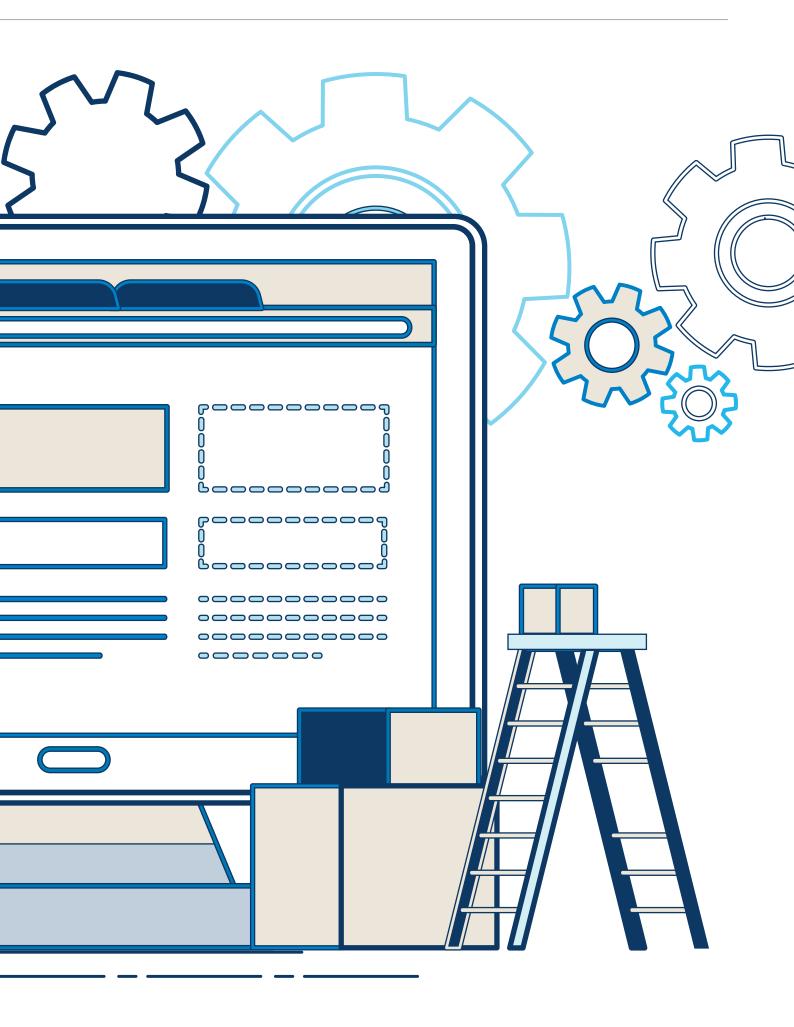
This evaluation determines whether the websites are in accordance with standard Interaction Design Principles (IDPs).

The user experience test was conducted through a survey of citizens on their experience of using the High Court websites. The respondents ranked each website on key factors such as ease of use, website aesthetics, speed of loading, the quantity of information, and variety of information. To build on the results from the user experience

test, a detailed survey was conducted in the form of a task-based usability test. The respondents for the detailed survey were given specific tasks to be performed on each court website. The ease of completing the task and their overall experience with the website was recorded for further analysis. In the heuristic evaluation, each website was assessed by researchers from the DAKSH Centre of Excellence for Law and Technology according to standard IDPs and specific issues were identified. Finally, improvements have been suggested for all the websites based on the results of each element of the evaluation separately as well as together.

The structure of the report is as follows: chapter 2 presents the methodology and findings of the user experience test; chapter 3 describes and presents results from the task-based usability test; chapter 4 describes and provides findings from the heuristic evaluation, and the report concludes with suggestions and recommendations in chapter 5.





# The user experience test determines if websites are structured intuitively for users.

- A survey of 652 respondents was conducted which captured information regarding accessibility, aesthetics, usability, and help available.
- Respondents said that the accessibility of the websites met their expectations.
- Respondents felt that the speed of the website for the High Court of Delhi either met or exceeded their expectations. large number of respondents did not feel that the speed of the websites for the High Court of Bombay (35%) and High Court of Karnataka (36%) met their expectations.
- In terms of architecture, the lack of user-friendly and advanced search tools on the website, multiple pieces of scrolling content, and cluttered navigation bars made users dissatisfied with website structures.
- Most users felt that the quantity and variety of information provided on these websites met their expectations.

This chapter presents an evaluation of ■ the six High Court websites through a user experience test. The objective of this test was to determine whether the websites are structured intuitively enough that users with different levels of comfort with technology are able to navigate and use the website comfortably. UX evaluation methods can be classified into four broad categories: surveys, lab studies, field studies, and expert evaluations. Amongst these, surveys, specifically online surveys are an effective way to test website experiences, especially from a large audience. As High Court websites must be accessible to users irrespective of whether they are first-time users or frequent users of the website, the survey collected responses from both categories of users.

# A. Methodology

The experience of users was captured by surveying citizens from diverse backgrounds. The survey was designed to capture information regarding prior experience of the respondents in accessing websites of the Indian judiciary, and more particularly, to gain a granular understanding of the experience of users in accessing one specific High Court website with respect to the following factors:

 accessibility through different media (computer and mobile phone), and different web browsers (Google Chrome, Safari, and Microsoft Edge).

- 2. aesthetics in terms of colour, visuals, white space allocation, readability, design architecture, and clarity of the content.
- usability in terms of ease of finding the required information, ease of use of the interface, loading speed of the content, quantity and variety of information present.
- help provided in terms of documentation, a site map, and contact information (email address, phone number, postal address).

The survey also captured the sociodemographic characteristics of the respondents such as gender, age, state, region (rural-urban), education, and profession. The questionnaire was built on Google Forms (six forms for six high courts) and linked to the email addresses provided by the respondent.

As the purpose of the survey was to receive inputs from people belonging to diverse backgrounds, 642 respondents were surveyed across the six High Courts with representation from male and female respondents, respondents residing in urban and rural areas, and respondents below and above the age of 40 years. A detailed breakup of the number of respondents in each of these categories is provided in Appendix A.1.

The survey was conducted through a snowball sampling method with the link to the survey questionnaire being circulated through social media platforms such as WhatsApp, LinkedIn, Twitter, and Facebook to reach a wide audience. In order to ensure that the survey

received valid responses, a random sample of 10-12% of the respondents were chosen for verification calls. During these calls, responses to 4 or 5 questions of the survey were verified to ensure the authenticity of the data filled by users.

# **B. Findings**

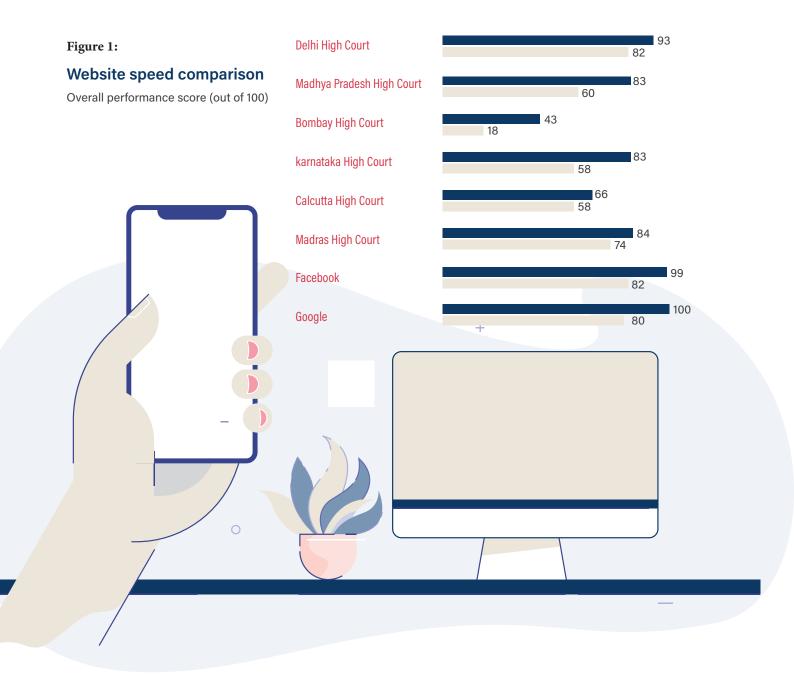
To understand the respondents' experiences in using the select High Court websites, it is also useful to know if they are familiar with using websites related to the Indian judiciary. Of the respondents surveyed, 43% of the respondents (281 respondents) were first -time users, while 57% of the respondents (371 respondents) had visited such a website in the past. Amongst those who had visited such a website before, the highest number of respondents had visited the website of a High Court (73%) or the website of the Supreme Court (62%). The number of respondents who had used the National Judicial Data Grid (NJDG) was the lowest, with only 51 respondents saying they had done so. While over half the respondents had accessed a website related to the Indian judiciary, only 26% of them said that they had used the website frequently.

Most users (72%) who had visited a website of the Indian judiciary in the past stated that they used the websites to access judgments or orders passed by the courts. This was followed by a large number of respondents (64%) who visited these websites to access information regarding particular cases. When asked about which sections of the websites

they visited the most, responses showed that users used the websites to access judgments and orders, or case information. Almost all of the 371 respondents who had used such a website before, said they could access the information they sought, with a mere 6% who said they could not get the information they were looking for. This indicates that users were largely able to access the information they needed. However, what is equally important to understand is the ease with which users could access the information and whether there are any improvements that can be made to make the websites more intuitive and user-friendly.

The accessibility of a website can be assessed by understanding whether a person's expectation of a website is met. Therefore, respondents to the survey were asked to open the website of one of the six select High Courts and browse the website before responding to questions on how the website measured up against their expectations. The respondents were questioned about whether the High Court website met their expectations on five broad parameters: overall accessibility, speed in making content available, visibility and readability of content, nature of the information provided, and availability of support.

To assess the overall accessibility of the High Court websites, respondents were asked to indicate whether the websites were accessible from the browser they used. Most respondents (81%) said that the accessibility of the websites met their expectations; however, a lower proportion



of respondents (56%) felt that the ease with which they could use the website interface met their expectations. Significantly, 48% of the respondents who answered the survey with respect to the High Court of Bombay found that the ease with which they could use the interface did not meet their expectations. Particularly, respondents felt that the website was not easy to navigate on mobile phones and stated that the requirement of entering CAPTCHAs made the interface less user-

friendly. The number of respondents who responded positively regarding the High Court of Madhya Pradesh, however, was the highest amongst the six High Courts, with 82% of the respondents feeling that the ease with which they could use the interface met or exceeded their expectations.

An important aspect of access is also the speed with which the content of the websites loads and whether all the content is visible once the website has loaded. On this criterion

as well, the High Court of Bombay's website was found to be lacking, with 35% of the respondents who rated the website feeling that the loading speed of the website did not meet their expectations. Similarly, 36% of the respondents who rated the website of the High Court of Karnataka felt that its loading speed did not meet their expectations. Respondents felt that the website for the High Court of Delhi performed the best on this metric, with 82% of the respondents feeling that the loading speed either met or exceeded their expectations. In order to assess the speed of these six websites, the researchers monitored at the DAKSH Centre of Excellence for Law and Technology monitored their speed at three time intervals over two days and compared them to the loading speeds of the websites for Google and Facebook. The websites were tested using Google PageSpeed Insights and overall performance scores (out of 100) were recorded. The results from the speed test (conducted separately on a desktop as well as a mobile phone) are presented in Figure 1.

As seen in Figure 1, the website for the High Court of Delhi had the highest loading speeds, comparable to the websites of Google and Facebook, while the website for the High Court of Bombay had the lowest loading speeds (less than half of Delhi's speed on desktops and less than one fourth of Delhi's speed on mobile phones). This is in line with the findings from the user experience test. Further, the website of the High Court of Karnataka is seen to have the highest difference in speed when it comes to using

the website on a desktop versus using it on a mobile phone, suggesting that the Court should optimise its website design for mobile phones.

When questioned about whether all content (text, images, and buttons) loaded completely, the highest proportion respondents (across all six High Courts), 40%, said that the website of the High Court of Karnataka did not meet their expectations. The visibility and readability of content on a website are also important to understand its accessibility. For example, buttons that are too small or a large proportion of white space on a webpage can make it difficult for users to identify and find relevant sections of the website to locate information they are looking for. Similarly, adequate font sizes and an intuitive structure to categorise information on the websites can help users quickly access the information they require. When questioned about whether the architecture of the High Court websites met their expectations, the highest number of respondents across all the High Courts to say that the website exceeded their expectations said so with respect to the website of the High Court of Madhya Pradesh (17%). This is perhaps also indicative of why respondents who assessed the website of the High Court of Madhya Pradesh felt positively about the ease of using the interface. Close to half the respondents who assessed the website of the High Court of Bombay (48%), however, felt that the architecture of the website did not meet their expectations, this was the highest percentage of respondents

who felt so when compared to responses for the other five High Courts. Responses showed that some of the grievances of users included the lack of user-friendly and advanced search tools on the website, the notice banner at the top of the home page being cluttered and difficult to read, and lack of categories for notifications which made it hard for users to locate what they are looking for.

Regarding the readability of content on the websites, many respondents (43%) felt that the website of the High Court of Karnataka did not meet their expectations. While the reasons for the respondents feeling so may vary from person to person, it is possible that having multiple pieces of content auto-scrolling on the screen or the colours displayed in the dark theme being unclear make the content difficult to read. Many respondents, however, felt the website of the High Court of Madhya Pradesh fared well on this point, with 20% of the respondents feeling the readability of content on their website exceeded their expectations.

On being asked about the nature of information available on the High Court websites, i.e. the quantity of information (e.g., in terms of information from past years) and the variety of information, respondents for the websites of all the High Courts maintained a largely neutral stance, with the majority stating that the websites met their expectations. However, about 20% of them felt that the websites did not meet their expectations on quantity and variety.

In assessing the accessibility of any services, such as those provided on the High Court websites, it is imperative to also assess the support provided to users who may have questions regarding the information provided. In this regard, the survey also sought to understand whether respondents felt there was adequate documentation available on the website to help them navigate through the website and whether adequate contact information was provided in the event they sought to reach out to someone from the High Court for assistance.

The highest proportion of respondents who felt the websites did not meet their expectations on these fronts were those relating to the website of the High Court of Bombay and High Court of Madras, with 47% and 46% of the respondents respectively stating that the availability of documentation and contact information did not meet their expectations. For example, one of the types of documentation that the High Court of Bombay could provide to make their website more accessible is a step-by-step guide on finding the status of a case - by providing information regarding case types (abbreviations and full forms), how to determine which side a person should choose (whether original, civil, or criminal) and whether a person should select register or stamp. Similarly, if the website of the High Court of Karnataka could provide documentation that would indicate the difference in finding the status of a case through the "Case Status" tab as opposed to the "NJDG Case Status" tab, or when a person should use each such tab, users will find it easier to use.

The respondents were also asked about their overall experience in using the High Court websites and whether the websites met their expectations. Many respondents who assessed the website of the High Court of Karnataka felt that the website did not meet their expectations (37%). Further, 41% of them also said that it is likely that they would not use the website in the future. These were the highest proportion of respondents who felt so when compared

those dissatisfied with the other five High Court websites. Respondents were provided with also an optional feedback question to provide inputs regarding what thev would want to change in the High Court websites. These responses helped throw light on the nature of changes respondents seek. Many respondents felt that the design of the website of the High Court of Karnataka seemed outdated in terms of the style and layout

and suggested that

fewer distractive components scrolling on the pages, and better mobile responsiveness.

For further information and detailed findings from the user experience test, please refer to Appendix A.1.



a more appealing interface be used with less cluttered content, more whitespace,

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# A task-based usability test helps demonstrate how effectively users can use the website to perform certain tasks.



An in-depth survey was conducted on all 22 respondents who were asked to perform 10 tasks on all six select High Court websites to assess their usability.



Most respondents were able to successfully complete tasks related to finding information on court notices, circulars, and notifications. They were also able to complete tasks associated with finding information about the court, barring difficulties faced in finding information related to RTIs.



Fewer respondents successfully completed tasks related to finding information about cases in the High Courts. Not all websites provided abbreviations and full forms of case types which made it difficult for users to find details of particular cases.



Websites with multiple navigation bars and complex nonintuitive structures made it difficult for users to perform certain tasks as they were unable to effectively identify relevant sections of the website for the tasks.



Not all websites clearly laid out the names, designations, and contact details for Public Information Officers.

Similarly, users found it difficult to obtain contact details of the court on some High Court websites.

This chapter presents the evaluation of the select High Court websites through task-based usability tests. Usability tests use objective measures such as task completion time and number of clicks to perform a task to evaluate the UX for a website. The objective of this element is to test the usability of the websites through tests done by users on the website. The results are then evaluated to determine specific areas that the users had trouble with and where improvements can be made.

# Methodology

The experience of users while performing tasks was captured by conducting an indepth survey among users from different backgrounds. The survey contained a list of ten tasks to be completed by the respondents on each of the six select High Court websites. Their experience with each task was captured in terms of whether they were able to complete the task, the time taken to complete it, the number of clicks the task required, how they viewed the presentation of information, and the ease with which they were able to complete the task. The tasks that the respondents needed to carry out in the survey are as follows:

- Determine the number of cases of a given type in a given year (say criminal appeal cases in the year 2019). Download the case information of any single case.
- 2. Find the cause list of any court room on a given date and download the file.
- 3. Find the total number of judgments

- or orders for a month (say November 2019) or given date (say 11/11/2019) and download one judgment of any case.
- 4. Find the ten latest notifications regarding recruitments/results/exams related to the court and download the latest file.
- 5. Find the ten latest circulars/tenders uploaded on the website and download the latest file.
- 6. Count the total number of sitting judges.
- 7. Retrieve the contact information of the Right to Information (RTI) officer.
- 8. Download the court calendar for the current year.
- 9. Get the contact information of the court: telephone number, email ID, and address.
- 10. Find the latest ten general notices uploaded on the website and download the latest file.

The questionnaire was built on Google Forms (six forms for six high courts) and linked to the respondent's email address. As the survey under this element was time-consuming and required respondents to undertake ten tasks for each of the six High Court websites, a purposive sampling approach was used to identify 22 respondents belonging to various backgrounds. The sample for this survey consisted of legal practitioners, researchers, tech-savvy citizens, and non-tech savvy citizens.

In order to ensure that the respondents to the survey understood the purpose of the survey

and the method of evaluating the websites, an introductory session was conducted virtually for the respondents to explain the survey. The questionnaires were then circulated to the identified respondents through emails. The researchers were available to engage with the respondents to help with any issues they faced and ensure that the survey received valid responses. The process of validating the survey responses also included two phone calls to every respondent, one during the survey and one after the survey.

# **Findings**

The tasks that were to be completed by the respondents to this survey can be grouped into three broad categories: tasks related to cases, tasks related to court information, and tasks related to notices, circulars, and notifications. Figures 2, 3, and 4 show the number of respondents who successfully completed each task.

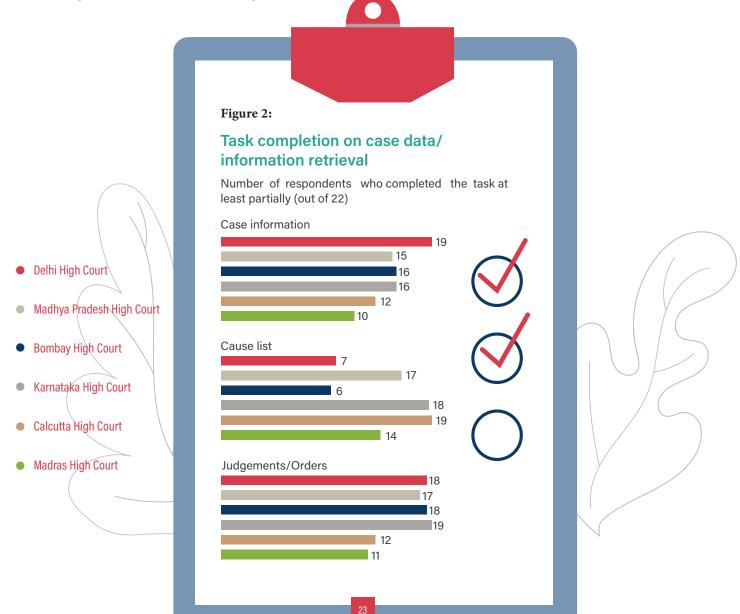


Figure 3:

# Task completion on court information

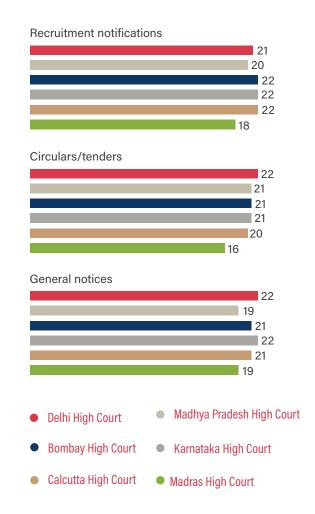
Number of respondents who completed the task at least partially (out of 22)

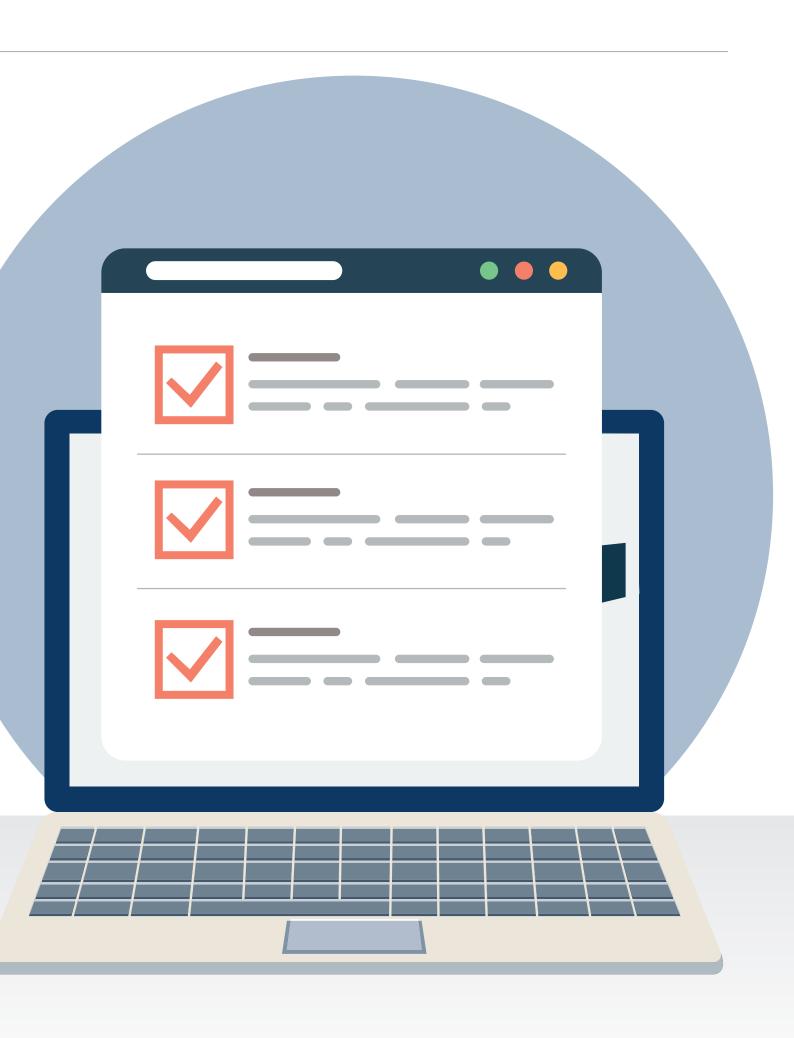
Number of Judges RTI officer information Court calender Court contact information 

Figure 4:

# Task completion on court notices, circulars, and notifications

Number of respondents who completed the task at least partially (out of 22)





As seen in Figure 4, most respondents were able to successfully complete tasks related to finding information on court notices, circulars, and notifications. Similarly, most respondents were able to complete tasks associated with finding information about the court, barring the difficulty they faced in finding information related to RTIs. However, a smaller number of respondents successfully completed tasks related to finding information about cases in the High Courts.

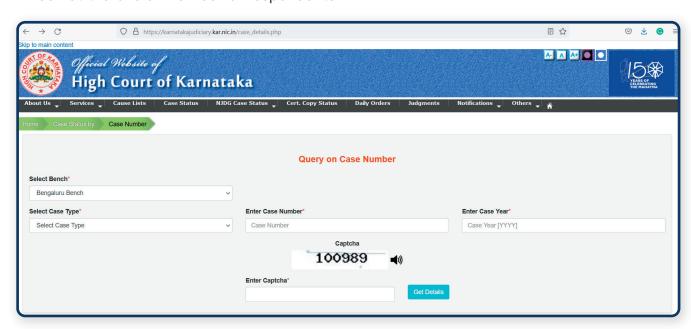
While detailed findings from responses to the task-based usability tests are presented in Appendix A.2, the following sections provide insights into findings from each of the ten tasks.

## TASK 1:

Download case information of a case of given case type and year (e.g., criminal appeal in 2019), and count the number of cases of that case type.

A look at the overall number of respondents

who could complete the task shows that 10 to 19 respondents (out of 22) could at least partially complete the task in each of the six websites. There were 19 respondents who could do so on the website of the High Court of Delhi, and 16 each on the websites of the High Courts of Karnataka and Bombay. This is followed by the High Courts of Madhya Pradesh, Calcutta, and Madras for which 15, 12, and 10 respondents respectively could complete the task at least partially. Half the respondents could only complete the task partially because respondents were unable to count the number of cases of a specific case type. This is probably because the websites of the High Courts of Delhi, Calcutta, and Madras contain functionalities that enable users to find out the number of cases that were filed under any given case type, however the websites of the High Courts of Bombay, Karnataka, and Madhya Pradesh do not allow for such searches.



10 to 19 respondents (out of 22) could at least partially complete task 1 in each of the six websites.

Among those who were able to retrieve information regarding specific cases, most users took longer than 3 minutes and more than 10 clicks to find the information on the websites of the High Courts of Bombay, Karnataka, and Madras. On the websites of the High Courts of Calcutta and Delhi, most users took 1-3 minutes and 6-10 clicks to find the information. Further, although Madhya Pradesh had an equal split of users who took 1-3 minutes and more than three minutes to find information regarding a case, most users took 1-5 clicks to find the information they were looking for. The time and number of clicks needed to find information are important because they demonstrate the intuitiveness of a website and the ease with which people can navigate a system and find what they are looking for. While different people may take varying amounts of time and clicks to reach a specific piece of information based on their comfort and knowledge of the system, surveying the experiences of multiple people can help demonstrate what most people are likely to experience.

Users were also asked how easy they felt it was to find the section of the website that provided case information and how easy

it was for them to complete this task. Most users across all the websites, barring that of the High Court of Delhi, were able to locate the relevant section with ease. However, most respondents felt that the section with the status of a case was a bit tough to locate on the website of the High Court of Delhi. A possible reason for this could be that the other websites contain a link to "case status" or "services" on the main banner at the top of the website, while the High Court of Delhi has the same on the left-side panel buried in the midst of other links. A more prominent location on the website or highlighting the link in some form may help users locate the link with greater ease.

Most users also felt that finding the details of a criminal appeal case in Delhi was more difficult when compared to doing so on the websites of the other five High Courts. This could possibly be attributed to the fact that the other websites provide the full forms of the case types while Delhi only contains abbreviations of the case types. While frequent users of the court system may not find abbreviations difficult to decode, ordinary citizens or users who are unfamiliar with the case types used in different courts are unlikely to find the information with ease. In this regard, it must also be noted that merely providing search features with full forms (without abbreviations of case types) also makes it difficult for new users to find out details of their case. For example, a new user at the High Court of Bombay would find it difficult to locate the status of a case under the case type 'SAST' without knowing what it stands for. Therefore, it is ideal that websites provide abbreviations along with full forms to make the search options as user friendly as possible. Further, when asked about the format of the search engine that users would prefer, a majority of the users felt that having a drop-down menu of case types coupled with an auto-filling feature that suggests case types as people enter the first few letters of the case type would make the search functionality more effective.

### TASK 2

# Download the cause list of a courtroom for any date between 1 December 2020 and 8 December 2020.

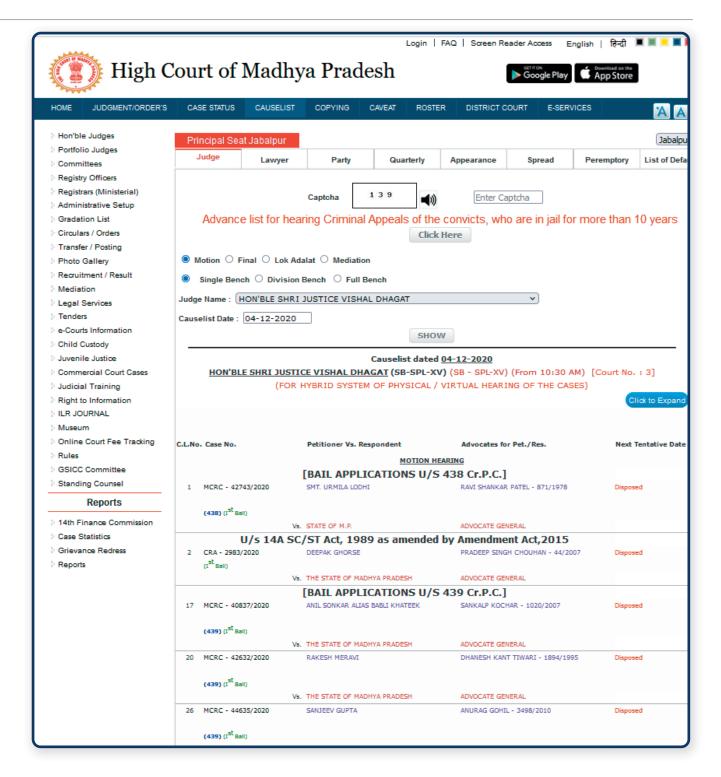
Most respondents were able to locate a cause list in this date range on the websites of the High Courts of Calcutta, Madhya Pradesh, and Karnataka. The High Court of Madras only provides access to cause lists that are a maximum of 14 days old, and although the High Court of Bombay does provide a link to archived cause lists, the functionality appears faulty and does not provide results for searches. Further, most respondents were

unable to retrieve a cause list in the specified date range from the High Court of Delhi. It must be noted that while the High Court of Delhi provides older cause lists under their "PDF Cause List" option where users have to pass through several pages showing 10 documents per page to reach an older date. The "Customised Cause List" option on the website did not provide any information when an old date was selected, possibly leading many users to believe that they were not available.

In terms of the ease with which users could locate the information they sought, most users could do so in under 10 clicks across all the courts and found it easy or moderately easy to find the relevant section on the websites and complete the task. When asked about the preferred format for a cause list, most users stated that they would prefer if all entries of the cause list were displayed on a single page, rather than have it split over multiple pages that users would then need to navigate through.



Most respondents were able to locate a cause list in this date range on the websites of the High Courts of Calcutta, Madhya Pradesh, and Karnataka.



### TASK 3

# Find the total number of judgments/orders for a given month or a day.

Around 80% of the respondents were able to complete this task at least partially for the High Courts of Bombay, Delhi, Karnataka, and Madhya Pradesh. The lowest number of respondents, 50%, were able to complete the task for the High Court of Madras. A possible explanation for this may be that

the website for the High Court of Madras provides search functionalities based on case number, party, judge name, and free text but does not explicitly contain a search feature based on dates. While a person can find a particular judgment using the combination of a date and judge name, for those unaware



of the name of the judge, merely knowing the date of judgment would be insufficient to effectively search for a judgment. It may therefore be useful for users to be provided with a date search for judgments as provided on the websites of the other High Courts.

Most of the respondents who were able to complete the task did so in less than 3 minutes across all the courts and said they required about 6 to 10 clicks to find the information they needed, the only exception being that most respondents said they could find the information under 5 clicks for the High Court of Delhi. In terms of the ease of accessing the relevant section, most respondents across all the courts found it easy to access the section and found it moderately easy to complete the task.



Around 80% of the respondents were able to complete task 43 at least partially for the High Courts of Bombay, Delhi, Karnataka, and Madhya Pradesh.

# TASK 4

# Download the latest notification regarding recruitment/careers/exams on the website.

More than 90% of the respondents were able to complete the task for all the High Courts except the High Court of Madras, where 81% of the respondents were able to complete the task at least partially. A possible reason for a lower number of respondents completing the task on the website of the High Court of Madras could be because the website has multiple navigation bars with links at the top of the webpage, in the middle, on the left, on the right, and at the bottom (the link to the recruitments page was on the second navigation bar on the right side and on the lower end of the webpage). Such a website structure makes it difficult for users to efficiently find what they are looking for.

Most respondents across the High Courts were able to complete the task in less than a minute, except for the High Court of Delhi and High Court of Madras. For Delhi, an equal number of respondents took less than a minute and 1 to 3 minutes, while for Madras, 27% took over 3 minutes. However, most respondents across all the High Courts were able to complete the task in under 5

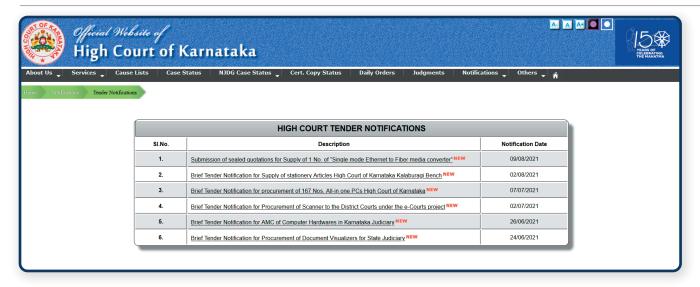
clicks. This shows that though users do not have to go through multiple webpages to find what they are looking for, the structure of the websites play a large role in determining how long users take to find the relevant section for the information they need.

When the respondents were asked about the ease with which they could find the relevant section of the websites and complete the task, more than 90% of the respondents felt it was easy to find the relevant section and complete the task for the High Courts of Calcutta and Karnataka. More than 70% of the respondents found it easy for the High Court of Bombay, and while 80% of the respondents found it easy to complete the task for the High Court of Delhi, only 62% felt it was easy to find the relevant section on the website. Only 55%, found it easy to find the relevant section for the High Court of Madras.

With respect to the placement of the

recruitment/careers section on the website. 48% of the respondents felt that its placement on the website of the High Court of Delhi did not meet their expectations - this was the highest proportion of respondents who felt so across all the High Courts. A possible reason for this could be that information regarding recruitments is placed as a secondlevel link on the tab for "Public Notices", as opposed to the other websites that have the information under a separate dedicated tab or under the broader umbrella of notifications. The usage of such terminology may have caused respondents to find the placement non-intuitive. A significant proportion of respondents, 27%, also felt the placement of the section did not meet their expectations for the High Court of Madras. However, less than 15% of the respondents felt the placement did not meet their expectations for the other four High Courts.





### TASK 5

# Download the latest circular/tender uploaded on the website.

More than 90% of the respondents were able to complete this task at least partially across all the High Courts, except the High Court of Madras, where only 73% of the respondents could complete the task.



A majority of the respondents across all the High Courts took 1 to 5 clicks to complete task 5

A majority of the respondents across all the High Courts took 1 to 5 clicks to complete the task, and the largest number of respondents across all the High Courts, except Delhi and Madras, could complete the task in less than a minute. The largest number of respondents took between 1 and 3 minutes to complete the task for the High Courts of Delhi and Madras, with 25% even taking more than 3 minutes for the High Court of Madras.

Similar to experiences for other tasks on the website of the High Court of Madras, a low proportion of respondents found it easy to find the relevant section on the website (56%)

or easy to complete the task (62%). This reiterates the difficulty in navigating through the website and finding information with ease.

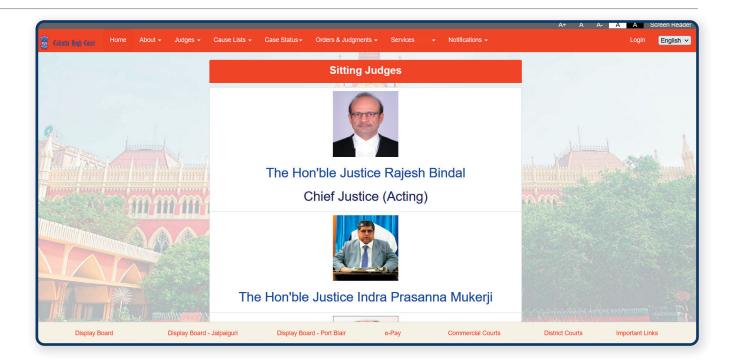
# TASK 6

# Count the total number of sitting judges in the High Court.

This task saw a near 100% completion rate across all six High Courts. Respondents were able to count the number of judges very quickly for the High Court of Bombay, with 81% doing so in less than a minute. The other High Courts had a lower proportion of respondents who could count the number of judges in less than a minute (27%-45%). The reason respondents would have been able to count the judges in the High Court of Bombay easily is because the website provides a numbered list of the judges, unlike the other High Courts where respondents would have to count the number of judges manually. A large proportion of respondents (36%) also



Respondents were able to count the number of judges very quickly for the High Court of Bombay, with 81% doing so in less than a minute.



required more than 6 clicks to complete the task, and only 55% of the respondents found it easy to complete the task for the High Court of Delhi. The reason for this could be that the website does not provide the list of judges in a single webpage, and users will have to go through multiple pages with 9 judge profiles per page in order to count the number of judges.

# TASK 7

Retrieve contact information of the RTI officer(s) and find out the date on which the information was last updated.

The largest proportion of respondents (73%) could at least partially complete this task for the High Courts of Bombay and Madras. There were fewer respondents who could at least partially complete this task for the High Courts of Karnataka (68%) and Delhi (55%). In comparison, only 18% and 9% of the respondents could do so for the High Courts of Madhya Pradesh and Calcutta, respectively. It must be noted here that the reason for fewer respondents feeling like they could complete the task for the High Court of Madhya Pradesh could be because its website provides an



e-RTI service, unlike the traditional model of providing complete contact details of the Public Information Officers. Further, for the High Court of Calcutta, the reason that few respondents felt that they completed the task could be the fact that the website contains a gazette notification containing the designation of judges in various establishments who are Public Information Officers but does not provide any contact information for them.

While most respondents were able to complete the task in under 3 minutes, 42% of the respondents took over 3 minutes to complete the task for the High Court of Delhi. This could be due to the High Court of Delhi providing particulars of the Public Information Officers under one of the 20 links supplied with respect to RTIs. The location of the contact information would also explain why a large number of respondents found it moderately

easy or difficult to find the relevant section (83%) and to complete the task (92%). In order to strengthen the mechanism of providing citizens with the right to information, every High Court website must ideally contain an easy to access link that provides the names, designations, and contact details for Public Information Officers.

### TASK 8

# Download the court calendar for the current year.

Respondents found this task relatively simple to complete compared to the other tasks, with over 90% of the respondents completing this task for each High Court, except the High Court of Madras, where 73% of the respondents were able to complete the task. The reason for fewer respondents being able to find the court calendar for the High Court of Madras could be due to the website's



Most respondents across all courts were able to complete Task 8 in under 1 minute and less than 5 clicks.

complex structure, as mentioned for earlier tasks as well.

Most respondents across all courts were able to complete this task in under 1 minute and less than 5 clicks. Further, amongst all the respondents who were able to complete the task, most of them felt that it was easy to locate the relevant section on the website and complete the task.

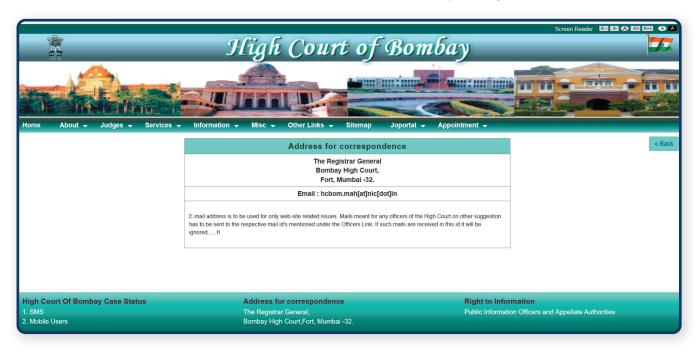
### TASK 9

Get the contact information of the court: telephone number, email id, address.

Respondents to the survey were unable

to find the telephone number for the High Courts of Bombay and Delhi, however, a large majority of the respondents could find the relevant details for the other four High Courts. Most respondents across all the High Courts felt that they could find the information in less than a minute and under 5 clicks.

Most respondents across all High Courts, except the High Court of Delhi, also felt that they could find the relevant section of the website and complete the task with ease. However, over 67% of the respondents found it moderately easy to difficult to find the relevant section and 80% found it moderately easy to difficult to complete the task for the High Court of Delhi. This could be because respondents mentioned the webpage with the email details often crashed when they tried to access it. Further, as the website does not contain a standard "Contact Us" section, users will see the address of the High Court mentioned separately from the email address.



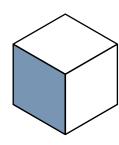
### **TASK 10**

# Download the latest general notice uploaded on the website.

Respondents across all the six High Courts found this task relatively simple to complete. Nearly all respondents were able to complete the task across the six High Courts and many were able to do so in less than 1 minute and less than 5 clicks. The majority of the respondents also felt that it was easy to find the relevant section on the website and complete the task. However, 36% and 47% of the respondents for the High Court of Karnataka and Madras respectively felt it was moderately easy to difficult to locate the relevant section and

complete the task. As indicated earlier, a more intuitive and easy-to-navigate website structure for the High Court of Madras can significantly improve users' experiences in locating the information they need.









### A heuristic evaluation measures the compliance of an interface with recognised standard usability principles.





The select High Court websites were evaluated on 10 standard Interaction Design Principles with each having multiple attributes against which the websites were measured.



Understanding the language used on the websites plays a vital role in improving its usability, however, none of the six websites provide clickable explainers for technical words, and many of them do not provide the option to change the language used on the website.



All the websites contain features that aid in recognition (rather than recall). However, only two of the six websites provide a navigation path to indicate how users reached a particular page, and none of them provide auto-filled suggestions for users searching for any information on the website.



Some of the areas where all the High Court websites performed well include assisting users who forgot their passwords, alerting users about an incorrect CAPTCHA, notifying users that no cases were found based on the information they submitted, and not using technical jargon while pointing out errors.



While 5 out of the 6 websites provided a sitemap, the High Court of Calcutta's website does not contain a sitemap. With respect to the 'search' function, barring the website for the High Court of Delhi, none of the other 5 websites provide a search function on every page of the website.

heuristic evaluation is a method used Ato identify usability problems with any user interface design. The evaluation is conducted by a small group of people who measure the compliance of an interface recognized standard usability with principles, i.e., heuristics. Jakob Nielsen and Rolf Molich originally developed the heuristics for the evaluation in 1990, after which Nielsen then refined the heuristics in 1994 to arrive at the standard followed today. This chapter presents a heuristic evaluation of the six High Court websites under study. The heuristic evaluation aims to determine whether the websites are in accordance with standard Interaction Design Principles (IDPs) as developed by Jakob Nielsen, as well as to identify specific areas of the website that can be improved.

### Methodology

In order to carry out a comprehensive evaluation of the six High Court websites based on each of the 10 standard IDPs, a variety of attributes were analysed to ascertain how the websites measure up for each IDP. The 10 IDPs, along with examples of the attributes used for each IDP, are provided below:

#### 1. VISIBILITY OF SYSTEM STATUS

This principle evaluates how well the state of the website is conveyed to the users. It checks whether appropriate feedback about the website is provided within a reasonable time and if it is communicated to users through different graphics and explainers. By allowing users to understand the status of a system, the website can allow users to proceed to the next step to reach their goal without wasting any effort. Examples of a few attributes considered are indicators to locate the user's navigation position, indicators to differentiate clickable and non-clickable content, and indicators to show that the website is loading.

### 2. MATCH BETWEEN SYSTEM AND THE REAL WORLD

This principle evaluates the website with respect to three criteria: (i) whether the website presents information in the user's language, (ii) whether it follows real-world conventions, and (iii) whether the information and content appear in a natural and logical order. All of these factors are evaluated in the context of evaluating High Court websites in India. Examples of a few attributes considered are: availability of the site in multiple languages, provision of a zoom in and zoom out feature, provision of different menu bars, and explanations for legal jargon.

The heuristic evaluation aims to determine whether the websites are in accordance with standard Interaction Design Principles (IDPs)

#### 3. USER CONTROL AND FREEDOM

This principle evaluates whether the user can undo and redo tasks on the website and whether there is an option to stop the ongoing process. It also evaluates the options provided on the website for the user to control navigation and surf freely. Examples of a few attributes considered are: availability of various buttons (e.g., back, next, and refresh), availability of links to other court websites, and different options to search for case information.

#### 4. CONSISTENCY AND STANDARDS

This principle evaluates whether internal and external consistency are maintained within the website. Users are likely to be more satisfied if consistency in functionality and certain design standards are maintained on the website. Examples of a few attributes considered are: similarity between mobile and desktop versions of the website, use of CAPTCHAs, and variety and standard of information provided on the website (case information, notices, tenders, court history).

### 5. ERROR PREVENTION (MISTAKE-PROOFING)

This principle evaluates whether proper rectification methods and suggestions are provided to resolve possible errors by the users or whether the system can prevent users from making errors in the first place. It also checks whether the system provides any warning messages. Examples of a few attributes considered are: provision of suggestions through auto-fill, provision of default dates, availability of sample formats

while entering data, and whether the website is consistent across webpages.

#### 6. RECOGNITION RATHER THAN RECALL

This principle evaluates whether the website's interface, elements, and sections help users recognise things they tend to forget and thereby help minimize their cognitive efforts. Recognition is more straightforward than recall. Examples of a few attributes considered are: whether last dates are highlighted for recruitment and tender notices, provision to highlight certain sections on the website, and options to see recent history on the website.

#### 7. FLEXIBILITY AND EFFICIENCY OF USE

This principle evaluates whether users can quickly move from one page to another. It evaluates whether suitable shortcuts, gestures, step-by-step wizards, mouse clearly labelled menus, accelerators, and personalisation of the content are features that are provided to speed up task completion. It also evaluates whether the system is flexible and efficient for new and experienced users, and whether they can access the required information using a minimum number of clicks. Examples of a few attributes considered are: availability of a list of shortcuts, shortcut to go to the home page such as clicking on the High Court logo, and availability of touch gestures on the mobile version.

### 8. OVERALL AESTHETICS AND MINIMALIST DESIGN

This principle evaluates whether the website's interface contains relevant and essential information or focuses more on irrelevant and

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rarely needed information. It also evaluates the aesthetics and visual effects on the website and whether they appeal to the users. Examples of a few attributes considered are: colour combinations of the website, font sizes of different content, white space allocation, and balance of content on the website.

### 9. HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS

This principle evaluates whether error messages are expressed in simple and precise terms. It also assesses whether the website explains the errors without any technical jargon, and provides constructive solutions to the user with shortcuts. Examples of a few attributes considered are: availability of a custom message when the server is down, error messages displayed when incorrect CAPTCHAs or user credentials are entered, and availability of instructions for resolving errors in simple language.

#### 10. HELP AND DOCUMENTATION

This principle evaluates whether the 'help and documentation' section can be easily found on the website. It also assesses whether help is provided in concrete steps or not. Examples of a few attributes considered are: availability of a search function, availability of an e-library, publication of court newsletters and annual reports, and information related to RTI rules and officers.

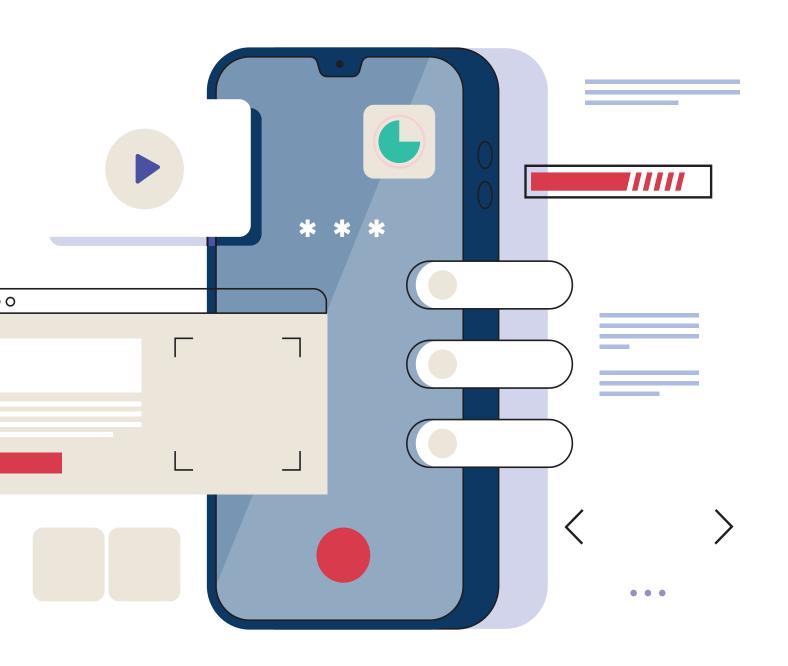
### **Findings**

This section of the report presents key findings for each of the 10 IDPs. A detailed report analysing the interface for each of the six select High Court websites with respect to every IDP (and the attributes therein) is provided in Appendix A.3.

### PRINCIPLE 1: VISIBILITY OF SYSTEM STATUS (USABILITY HEURISTIC)

This principle was used to evaluate the websites using 18 attributes. The High Court of Madhya Pradesh scored the highest under this IDP with a score of 14 out of 18, while the High Court of Calcutta scored the lowest with a score of 9 out of 18. The High Courts of Delhi, Bombay, and Karnataka each scored 13 out of 18, and the High Court of Madras scored 11 out of 18.

As the name of the IDP states, an important feature that websites must provide is an indication of the system status. One way to do that is by communicating to users information regarding whether the system has loaded completely or is still loading (and if so, how much of the system has loaded). However, all six High Court websites failed to provide a feature to indicate the status of loading. Without such a feature, users will not be well informed to make the right decision about whether they should wait for more time on the website, proceed with the understanding that the information they need is unavailable, or refresh their page, believing more information will appear. Similarly, another feature that the websites must provide is an option to know the status of a case (e.g., whether pending or disposed) as soon as they search for a case number on the case status page, without having to click on the case to view more details. While four of the six High Court websites do



meet this standard, the websites for the High Courts of Calcutta and Madras require users to drill down further into the case before they can find out the status.

However, it must be noted that all the six websites do well in meeting some of the other attributes under this IDP. For example, all of them provide indicators to differentiate between clickable and non-clickable content; they provide indicators such as "more" to view more details or entries and provide indicators for the new or latest content. Each of these greatly assist users in effectively navigating through the websites by minimising the time spent on clicking on content or links that are not relevant to them.

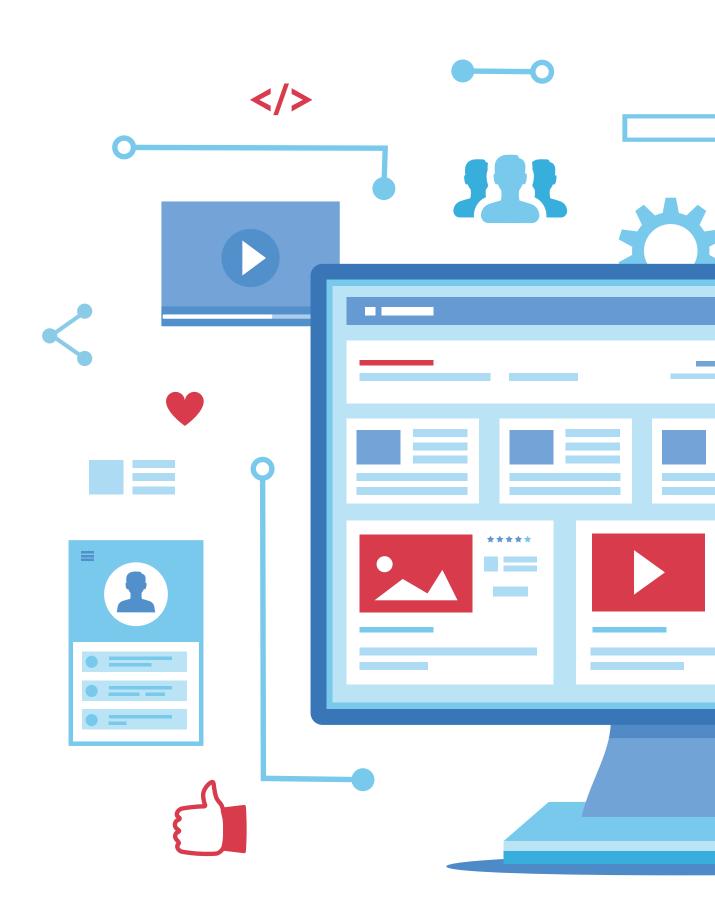
### PRINCIPLE 2: MATCH BETWEEN SYSTEM AND THE REAL WORLD

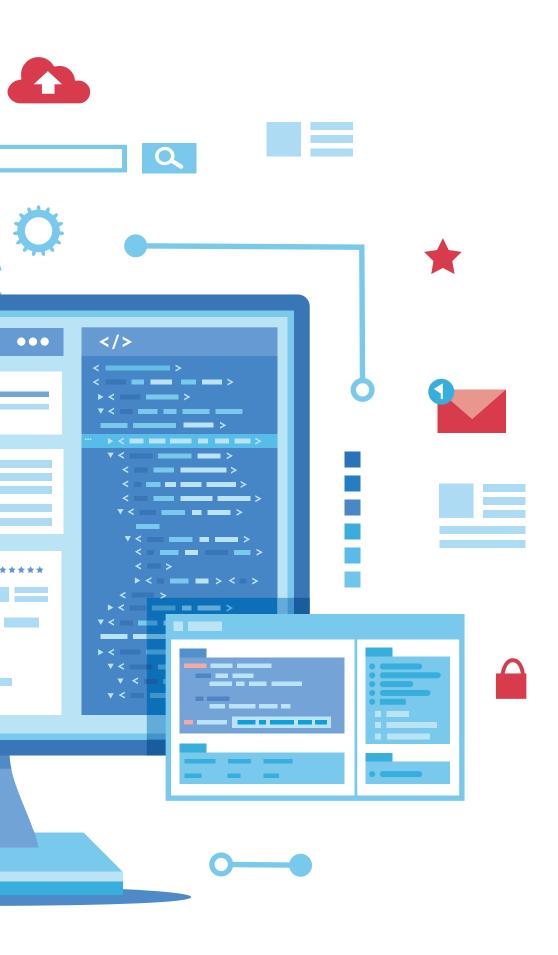
There were 15 attributes under this IDP that were used to evaluate the six High Court websites. The High Court of Madhya Pradesh scored that highest under this IDP with a score of 12 out of 15, followed closely by the High Court of Delhi, which scored 11 out of 15. The High Court of Madras and the High Courts of Karnataka and Calcutta scored nearly the same, with the former scoring 9 out of 15 while the latter two scored 8.75 and 10.75, respectively. The High Court of Bombay scored the least of the six, with a score of 7.75 out of 15.

An important aspect of websites that this IDP looks to assess is whether users can understand what something means without having to go elsewhere to look up terms or

concepts. This is an area that all six High Court websites were found to be lacking. It was found that there were no clickable explainers that were easily accessible against technical words. Words such as IA, caveat, and roster are used without explaining to new users or lay persons what these terms mean. This can hinder how these websites are used by citizens and litigants or anyone unfamiliar with such jargon. Similarly, the non-availability of options to change the website's language is another functionality that can restrict these websites' use. is the non-availability of options to change the website's language. Apart from the High Courts of Madhya Pradesh and Calcutta, none of the other four High Courts provides an option to change the language on the website from English.

Some of the areas where all six High Court websites meet expected standards relate to the use of real-life images and following standard conventions in helping users effectively identify information. As this IDP helps evaluate whether images used on the website are clear and unambiguous, the use of photos of the High Courts on their respective websites enables users to associate the system and the real world more effectively. Further, by following conventions such as using navigation bars or highlighting holidays of the court calendars, users can effectively identify information based on methods that they are used to, which in turn can help them make effective use of their time on these websites.





### PRINCIPLE 3: USER CONTROL AND FREEDOM

This IDP was used to evaluate the websites based on 9 attributes. The website that scored the highest, with a score of 8.25 out of 9, is that of the High Court of Bombay. It was followed closely by the other High Court websites, scoring in the range of 7 to 7.5 out of 9.

The fairly high scores of all the High Court wesbites on this IDP indicate that all of them are user-friendly in terms of allowing users to rectify any errors they make or allowing them to exit pages they do not want to stay on. This gives users the freedom to do as they wish. The websites were found to be lacking in providing users options in performing certain actions. For example, webpages did not always provide users with the option to download or print files, nor did they always give users the control and freedom to search for cases through multiple ways (such as by using the first information report number, or the legislation under which the case was filed, etc.).

### PRINCIPLE 4: CONSISTENCY AND STANDARDS

This principle consisted of 20 attributes that were used to evaluate the High Court websites. All of the six High Court websites received similar scores within a range of 15.16 to 17.5 out of 20, with the High Court of Calcutta scoring the least and the High Court of Bombay scoring the highest.

All the six websites were seen to maintain

consistency with respect to attributes such as the design, colours, and font sizes used in pages across the websites, providing certain core functionalities, and providing a standard list of information regarding cases, etc. However, there were some attributes where some websites met the standards while others did not. For E.g., as one of the functionalities used more frequently by users is the case status page, it is crucial that the page be accessible on the primary navigation bar, however not all websites adhered to that standard, thereby making it difficult for users to find it on each website.

### PRINCIPLE 5: ERROR PREVENTION (MISTAKE-PROOFING)

There were 12 attributes used to evaluate the High Court websites under this IDP. The performance of all six was mediocre at best for this IDP, with the High Court of Bombay scoring the highest at 7 out of 12, and the High Court of Calcutta scoring the lowest with a score of 5.25 out of 12.

This IDP was meant to understand whether the system prevented users from making errors and whether there existed ways to rectify their errors by providing suggestions. One of the attributes on which nearly every website did well (barring that of the High Court of Delhi) was in providing an alert informing users of an error when they tried to click on submit without filling in mandatory fields. In terms of attributes where it was rare to see a website fulfil the standard, the High Court of Calcutta was the only one to indicate

which part of the login credential (username or password) was incorrect. Similarly, only the High Court of Madras provided users with an alert that a PDF would open in a new tab or print window when they tried to access a document. Providing such alerts or warnings can help users confirm their actions before going ahead and can minimise the number of errors they make while using the websites.

### PRINCIPLE 6: RECOGNITION RATHER THAN RECALL

The websites were evaluated against this principle using 11 attributes. The High Court of Calcutta scored the lowest (4 out of 11), the High Courts of Bombay, Madras, and Madhya Pradesh each scored 5 out of 11, and the High Courts of Delhi and Karnataka scored 6 out of 11 for this IDP.

The provision of a navigation path for a website's users helps understand if the website helps reduce the amount of information a user has to remember. A navigation path displays at the top of the page the links that users clicked on to reach the page they are on, e.g., a navigation path can say "Home > Judges > CJ and Sitting Judges", this explains to users the path they used to reach the page about sitting judges, in case they want to go there in the future. Currently, only the websites for the High Courts of Bombay and Karnataka provide such a navigation path. Another feature that could greatly assist users in not having to memorise information is by providing suggestions through auto-filled information while searching for information on a website. None of the six websites currently provide for such a feature.

All the websites contain other important features that aid in recognition - drop-down menus where possible, dates of notifications or circulars, and mentioning which notifications or circulars are new. Each of these features on the website enables users to recognise the information they are looking for with minimal effort, thereby enhancing the efficiency with which users can use it.

### PRINCIPLE 7: FLEXIBILITY AND EFFICIENCY OF USE

This principle was used as a means to evaluate the websites through 8 attributes. None of the websites scored high on this principle, with scores varying from 2 to 2.75 out of 8.

All six websites provided certain features to enhance their efficiency, e.g., providing a homepage logo and allowing users to save a HTML page using a 'ctrl + s' shortcut. However, the broad areas of improvement for these websites under this IDP are to allow for more accessible shortcuts and some level of personalisation to see specific content based on their login credentials (e.g., a user who frequently checks information related to four cases can be provided shortcuts that directly link to information on those cases) - these can help users maximise returns from their time spent on the website by showing them what they need to know efficiently.

### PRINCIPLE 8: OVERALL AESTHETICS AND MINIMALIST DESIGN

This IDP contained 10 attributes that were used to evaluate the interface of the High

Court websites. The High Court of Delhi scored the highest for this IDP with 6.5 out of 10, while the website for the High Court of Calcutta scored the least with 4.75 out of 10.

The overarching aim of this IDP is to understand whether the website displays upfront the most relevant information without distracting users with information they may not require. An evaluation of the interface of websites in terms of highlighting clickable content, scaling the format of headings and sub-headings, and providing an aesthetic contrast of elements such as the text to the background helps users access the information they require effectively. Each of the six High Court websites either fulfil or do not fulfil similar attributes under this IDP, thereby providing all of them scores within a small range.

### PRINCIPLE 9: HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS

This principle consisted of 14 attributes that were used to evaluate the websites. The High Court of Madras had the highest score under this IDP (9.5 out of 14), followed by the High Courts of Calcutta and Madhya Pradesh with 9 out of 14, then the High Courts of Bombay and Karnataka with 8.5 out of 14, and lastly the High Court of Delhi with 8 out of 14.

Some of the areas where all the High Court websites performed well include assisting users who forgot their passwords, alerting users about an incorrect CAPTCHA, notifying users that no cases were found based on the information they submitted, and not using

technical jargon while pointing out errors. There were two areas where the website for the High Court of Delhi fell behind the other websites. First, the website did not provide a voice CAPTCHA option, and second, while retrieving information about a case, the website did not notify users that information was incorrectly entered. However, in indicating that login IDs and passwords are case sensitive, it was the only website that provided such a mechanism to prevent errors.

#### PRINCIPLE 10: HELP AND DOCUMENTATION

This IDP consisted of 22 attributes that were used to evaluate the websites. The website with the highest score was that of the High Court of Delhi with 13 out of 22, while the website for the High Court of Calcutta scored the lowest with 4.75 out of 22.

The only attribute where all the High Courts scored well was providing the RTI rules on their respective websites. Users of these High Court websites visit them to access information about the court or cases. However, in a situation where users do not find what they are looking for, they may be able to obtain the information they seek by filing an RTI application. Therefore, providing a copy of the RTI rules on the website can provide users with the help they need to access information. While all the websites were uniform in fulfilling only one attribute, they were uniform in not fulfilling many other attributes. For example, none of the six websites provided search functions that could accommodate any guery. None of them provided advanced

search functions, and none of them provided periodically up-to-date annual reports (for even every year for the past ten years).

Websites must also follow specific conventions that enable users to navigate through the website efficiently. Two of such important conventions are providing a sitemap and a 'search' function. While 5 out of the 6 websites provided a sitemap, the High Court of Calcutta's website does not provide it, making it difficult for users to directly get to the section they want without having to browse through every navigation bar. With respect to the 'search' function. However, barring the website for the High Court of Delhi, none of the other 5 websites provide a search function on every page of the website which would help users effectively search for what they are looking for.

#### **OVERALL SCORES**

Table 1 summarises the total score of each of the six High Court websites on the 10 IDPs. The websites for the High Courts of Delhi, Madhya Pradesh, and Bombay take the 1st or 2nd ranks in 6 IDPs, followed by the High Courts of Karnataka and Madras, which place 1st or 2nd in 5 IDPs, and then the High Court of Calcutta, which places 1st or 2nd in 2 IDPs.

Figure 5 represents how the six High Court websites performed on each of the IDPs on a percentage scale. The websites for the High Courts of Bombay and Delhi ranked 1st for 4 IDPs each, followed by the websites for the High Courts of Madras and Karnataka, which ranked 1st for 1 IDP each. The website for the

High Court Calcutta ranked last (6th) for 7 IDPs, which was the highest frequency of any website ranking last. Further, the websites for the High Courts of Madhya Pradesh and Madras have not been ranked in the last two positions (5th and 6th) for any of the 10 IDPs.

Table 1: Overall scores of the six High Court websites for the heuristic evaluation

IDP	Maximum score	Delhi	Madhya Pradesh	Bombay	Karnataka	Calcutta	Madras
Visibility of     system status	18.00	13.00	14.00	13.00	13.00	9.00	11.00
Match Between user and real worlds	15.00	11.00	12.00	7.75	8.75	10.75	9.00
User control and freedom	9.00	7.25	7.50	8.25	7.00	7.50	7.50
Consistency     and standard	20.00	15.56	15.75	17.5	17.21	15.16	16.41
5. Error prevention	12.00	6.25	6.75	7.00	5.50	5.25	6.00
6. Recognition rather than recall	11.00	6.00	5.00	5.00	6.00	4.00	5.00
7. Flexibility and efficiency of use	8.00	2.75	2.25	2.75	2.75	2.00	2.50
Aesthetic and minimalist design	10.00	6.50	5.25	5.50	5.00	4.75	6.00
9. Help users recognize, diagnose and recover from an error	14.00	8.00	9.00	8.50	8.50	9.00	9.50
10. Help and documentation	22.00	13.00	10.25	7.00	10.50	4.75	9.75

Note: Red indicates the 1st and 2nd highest score, yellow indicates the 3rd and 4th scores, and green indicates the last two scores, i.e., 5th and 6th. The colour blue has been used to indicate the maximum possible score in each IDP.

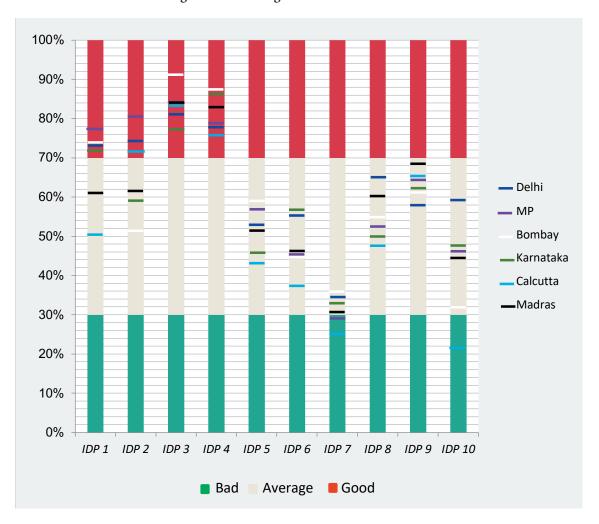


Figure 5: Percentage-wise score for each IDP

Figure 5 represents how the six High Court websites performed on each of the IDPs on a percentage scale. The websites for the High Courts of Bombay and Delhi ranked 1st for 4 IDPs each, followed by the websites for the High Courts of Madras and Karnataka, which ranked 1st for 1 IDP each. The website for the High Court Calcutta ranked last (6th) for 7 IDPs, which was the highest frequency of any website ranking last. Further, the websites for the High Courts of Madhya Pradesh and Madras have not been ranked in the last two positions (5th and 6th) for any of the 10 IDPs.

A point to note from Figure 5 is that there are clear IDPs where the websites uniformly perform better when compared to their scores on other IDPs. It is clear that all websites have high scores on user control and freedom,

and consistency and standards. Similarly, all of them performed poorly with respect to flexibility and efficiency of use.

Table 2 provides the percentage scores for each of the six High Court websites with respect to each IDP. Further, it also provides the average score for each IDP across all the six websites.

Table 2 shows that many improvements can be made to each of the six High Court websites. All the High Courts could particularly focus on three areas where the average score for the IDPs was below 50%: error prevention, recognition rather than recall, and help and documentation. The next section of the report provides key recommendations that can help improve the UI/UX of the select High Court websites.

Table 2: Percentage scores per IDP

IDP	Delhi	Madhya Pradesh	Bombay	Karnataka	Calcutta	Madras	Average Percentage Score
Visibility of system status	72.2	77.7	72.2	72.2	50.0	61.1	67.6
Match     Between user     and real     worlds	73.3	80.0	51.6	58.3	71.7	60.0	65.8
User control and freedom	80.5	83.3	91.6	77.7	83.3	83.3	83.3
Consistency     and standard	77.8	78.7	87.5	86.0	75.8	82.0	81.3
5. Error prevention	52.0	56.2	58.3	45.8	43.7	50	51.0
6. Recognition rather than recall	54.5	45.4	45.4	54.5	36.3	45.4	49.9
7. Flexibility and efficiency of use	34.3	28.1	34.3	34.3	25.0	31.2	31.2
8. Aesthetic and minimalist design	65.0	52.5	55.0	50.0	47.5	60.0	55.0
9. Help users recognize, diagnose and recover from an error	57.1	64.2	60.7	60.7	64.2	67.8	62.4
10. Help and documentation	59.1	46.6	31.8	47.7	21.6	44.3	41.9
							58.9
Average	62.6	61.3	58.9	58.7	51.9	58.5	58.7

Note: Red indicates the 1st and 2nd highest score, yellow indicates the 3rd and 4th scores, and green indicates the last two scores, i.e., 5th and 6th. The colour blue has been used to indicate the average score for each IDP and each website.



Based on our findings from the user experience test, the task-based usability test, and the heuristic evaluation, this section of the report contains suggestions to help improve the UI/UX of the six select High Court websites. While detailed suggestions regarding the websites of each High Court have been provided in Appendix A.4, key suggestions that apply to all six websites are given below:



### Information about cases

As demonstrated by the user experience test, sections with judgments/orders and case information are most used by users of the High Court websites. However, the task-based usability test showed that some users find it difficult to effectively use them to retrieve the information they want. This finding was supported by the heuristic evaluation, which showed that the average percentage score of all the websites for IDP 7 (efficiency and flexibility to use) and IDP 9 (help and documentation) are less than or near to 40%. The following suggestions can help improve the ease of retrieval of information:

- The placement of these sections should be clearly visible on the website with simple and straightforward names.
- The design and structure of the website must be optimised by providing clear and easy to use search options that minimize the number of times a user needs to click in order to find the information they want.

2

Considering these as the main sections/ functionalities of the website, links for this information should be provided on the primary navigation bar of the home page. The websites of the High Courts of Karnataka and Madhya Pradesh have done so.

Further, websites must ensure that there are shortcuts to these sections from other sections of the website.

4

There should be several search options provided to retrieve case information, including party name, judge name, case act, case type, FIR number, CNR number, and advocate name.

5

Auto-filling suggestion features should be provided while searching for information with respect to case types. This feature is currently lacking on all six websites.

6

Case types in search features across all the websites must be provided in full form together with abbreviations. This will help users effectively search for their cases irrespective of whether they know only the abbreviation or the full form. 7

Information regarding cases, cause lists and judgments/orders should be available on the same portal (with necessary changes), or at least with similar UIs. This will improve consistency across these sections and allow users to search for these details efficiently.

8

Step-by-step instructions on using sections such as case status, judgments, orders, and cause list should be provided in the respective sections. This can be done by providing a question mark at a prominent place in the section, which, by clicking on it, can open a dialog box with the steps and examples.

9

Format of CNR number, diary number and case number should be given in light font colour or by clickable explainers so that users can understand what they represent.



### Search features

The user experience test revealed that around 20% of the respondents were unsatisfied with the quantity and variety of information available on the websites. Further, some respondents also found the architecture of the websites and the interface difficult to use. The task-based usability test also revealed that respondents were often unable to find the required information with ease. This makes it important to ensure that the structure of these websites is more intuitive and user-friendly. The heuristic evaluation through IDP 1 (visibility of system status), IDP 2 (match between user and real world), IDP 5 (error prevention), and IDP 6 (recognition rather than recall) also demonstrated that there is room for improvement in the design and structure of these websites. Some of the steps that can be taken to improve the structure of the websites are:

1

A search function with an auto-fill option should be provided at the top of every page of the website. An 'advanced' search option should also be provided for longer queries, as far as possible.

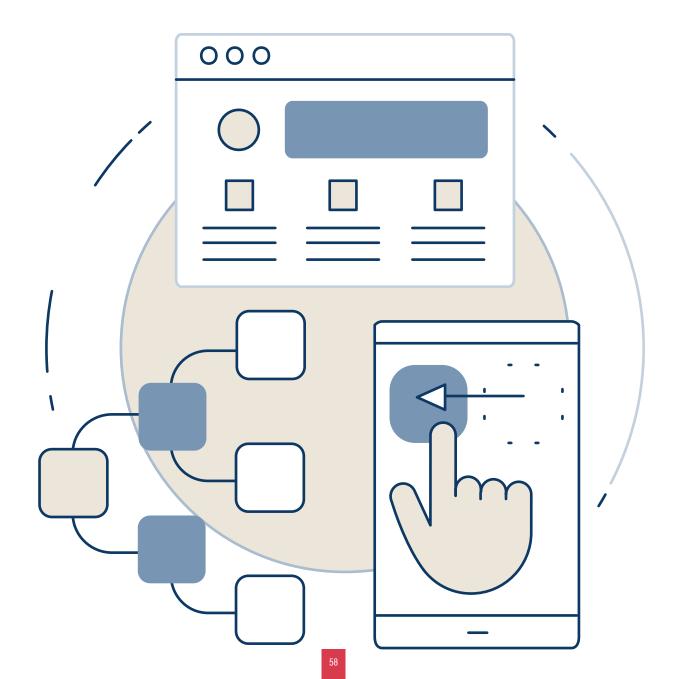
2

The navigation bars on the websites must be clear and the websites must not have numerous navigation bars. For example, websites could have 6 main sections such as case information, cause list, notices, about the court, help and contact information, and miscellaneous. Other sub-sections can then be put under these as sub-categories.



### Design and readability

Responses in the user test showed that the loading speed, design architecture, readability of the content, and ease of use of interface need to be improved. The heuristic evaluation also showed that the websites received an overall average score of 55% on IDP 8, aesthetic and minimalist design. Some of the measures that can be taken to improve the look of the interface are: provide better visuals, ensure readability of content, provide white space as well as balance the content, and use appropriate font sizes with sharper colors.





### Contact information

The task-based usability test showed that respondents were able to easily find the court calendar, information related to judges, and notices. However, contact information of the RTI officers was not easily accessible to users. Even though some respondents in the task-based usability test were able to get this information, it took them longer as compared to other tasks. It is therefore recommended that the following steps be taken to make the information more accessible:

1

Information related to RTIs must be accessible to users through a section on the website that can be easily found.

3

Instructions on how to file RTI queries should be provided under the 'RTI information' section. A separate portal pertaining to the same can also be provided on the website.

2

Contact information for the relevant authority at the High Court should be provided on the webpage and must include details such as telephone number, email id, address and a contact list of various administrative authorities.

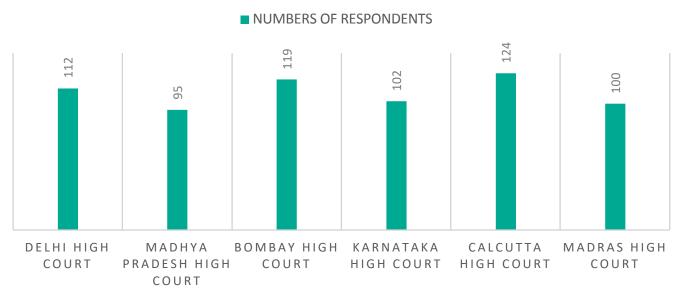
For a more detailed list of suggestions pertaining to each of the six High Court websites, please refer to Appendix A.4.



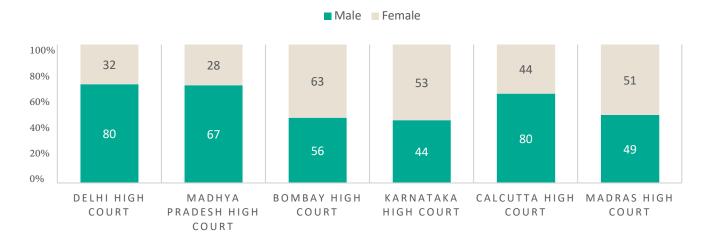
Note: Numbers written on the bars represent the actual number of responses and the coloured subbars represent the percentages.

### A.1. User experience test

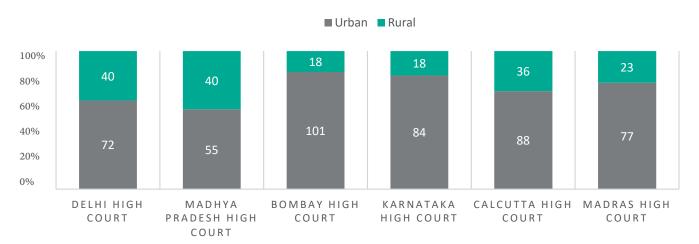
### **COURT-WISE RESPONDENTS**



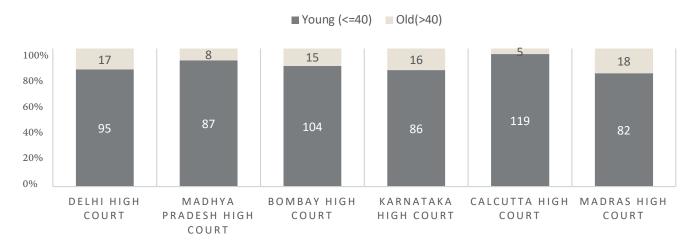
### **GENDER DIVERSITY OF RESPONDENTS**



### REGION-WISE(URBAN-RURAL) RESPONSES



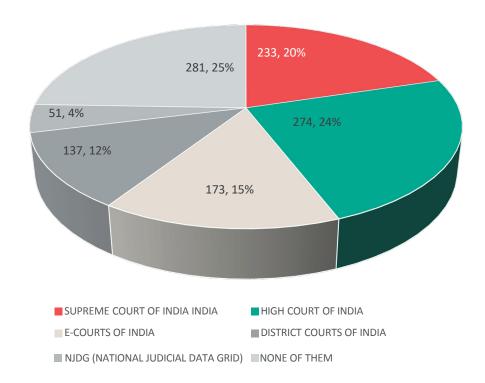
### AGE-WISE DIVERSITY OF RESPONDENTS



### Responses on use of court related website

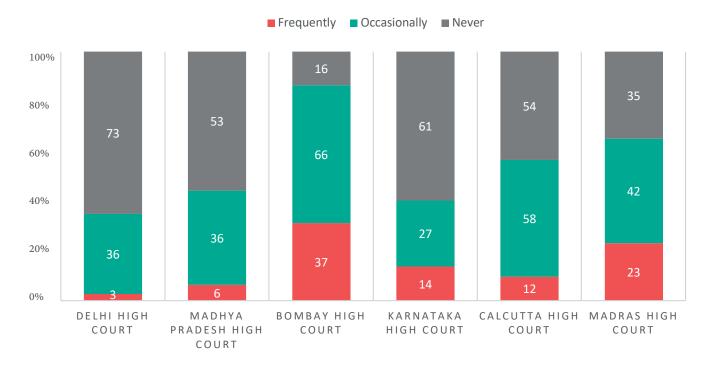
#### 1. WEBSITES USED BEFORE.

### TOTAL RESPONSES ON USE OF DIFFERENT COURT RELATED WEBSITES



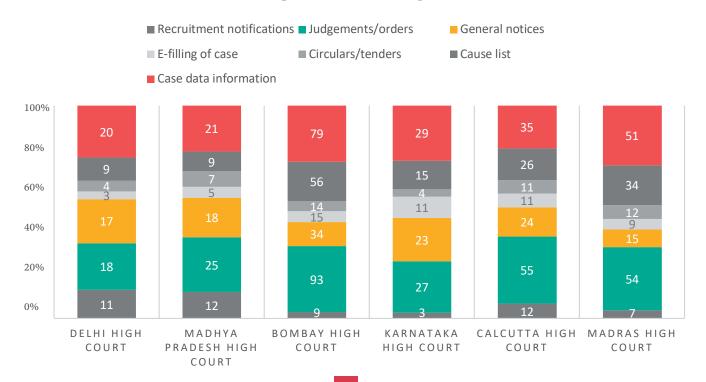
#### 2. USE OF WEBSITES OF INDIAN HIGH COURTS.

# RESPONSES ON HOW OFTEN RESPONDENTS HAVE USED INDIAN HIGH COURT WEBSITES BEFORE



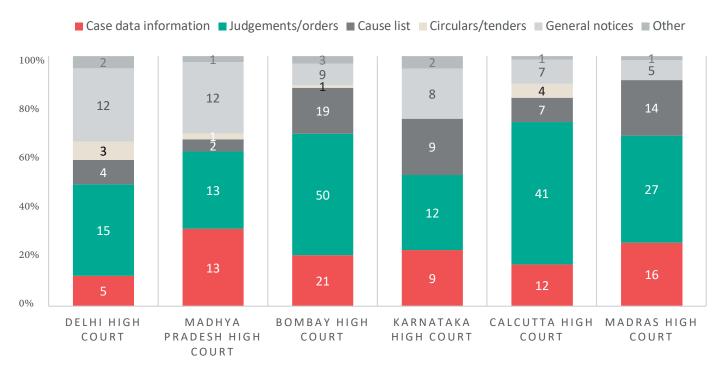
3. USE OF DIFFERENT SECTIONS OF THE WEBSITE (EXCLUDES RESPONDENTS WHO HAVE NOT USED THE WEBSITES BEFORE).

## RESPONSES ON USE OF DIFFERENT SECTIONS OF THE WEBSITE



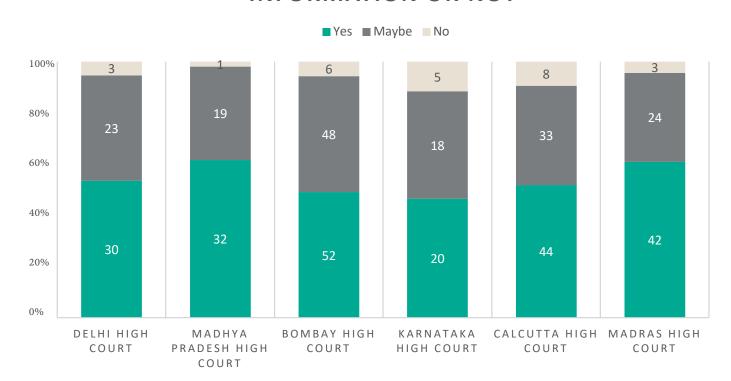
### 4. MOST VISITED SECTION OF THE WEBSITE (EXCLUDES RESPONDENTS WHO HAVE NOT USED THE WEBSITES BEFORE).

## RESPONDENTS ON MOST VISITED SECTIONS OF THE WEBSITE



5. WHETHER RESPONDENTS COULD GET THE EXPECTED INFORMATION ON WEBSITE OR NOT (EXCLUDES RESPONDENTS WHO HAVE NOT USED THE WEBSITES BEFORE).

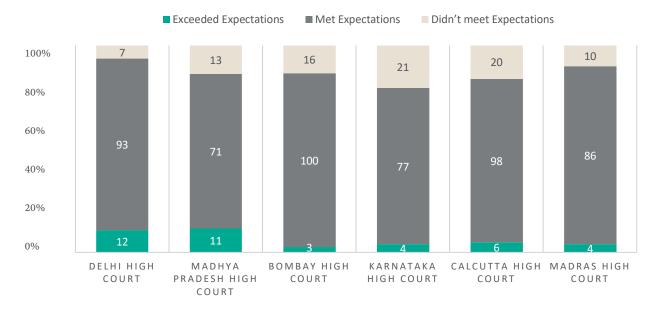
## COULD RESPONDENTS GET EXPECTED INFORMATION OR NOT



### 6. RESPONDENTS' EXPECTATIONS ON DIFFERENT ASPECTS OF THE WEBSITE.

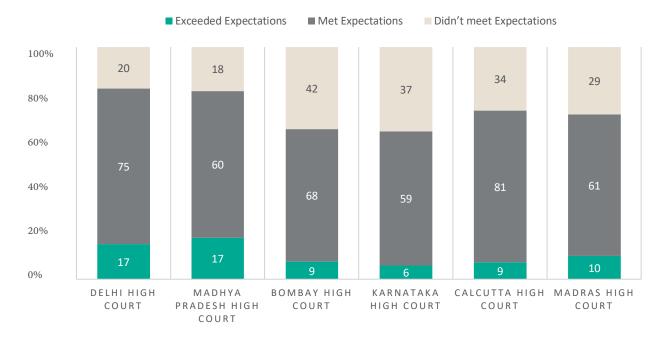
#### Accessible or not

## RESPONSES ON WEBSITE WAS ACCESSIBILE OR NOT

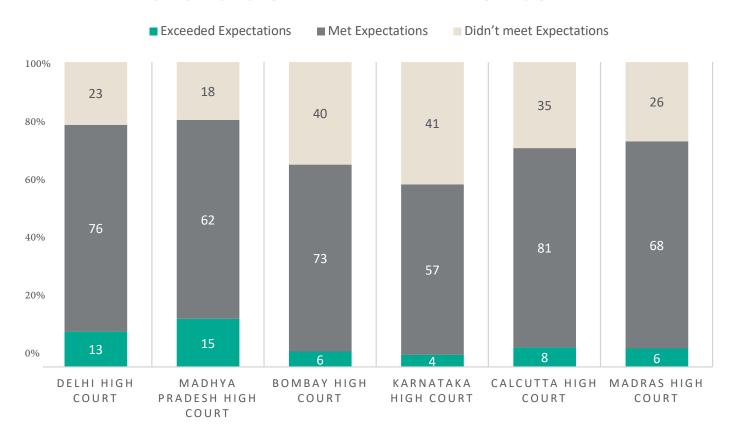


#### Website loading speed

#### RESPONSES ON WEBSITE LOADING SPEED

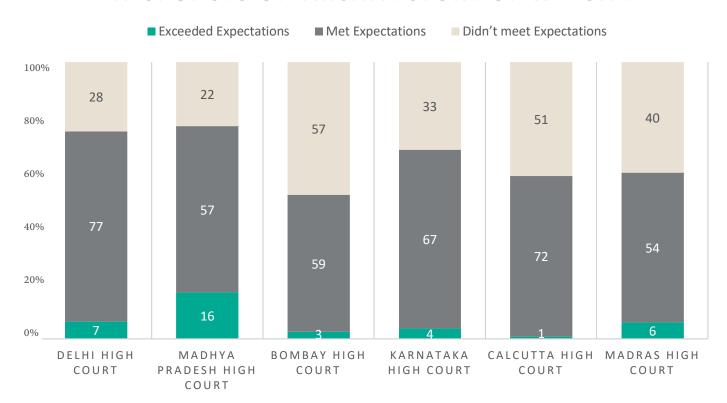


### **RESPONSES ON AVAILABILITY OF CONTENT**



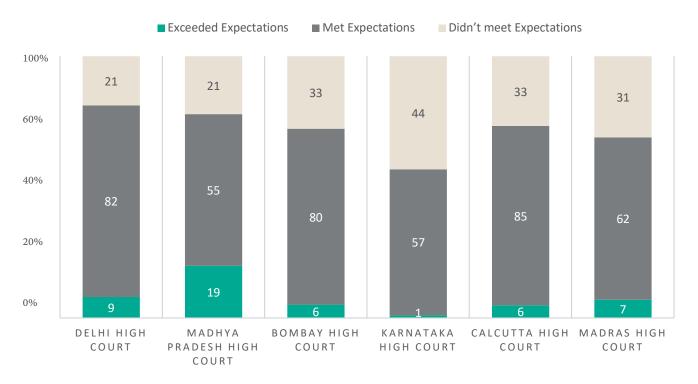
#### Architecture

### RESPONSES ON ARCHITECTURE OF WEBSITE



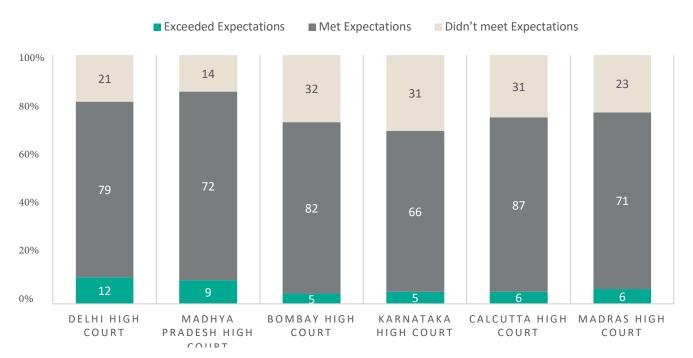
#### Readability

## RESPONSES ON READABILITY OF CONTENT ON WEBSITE

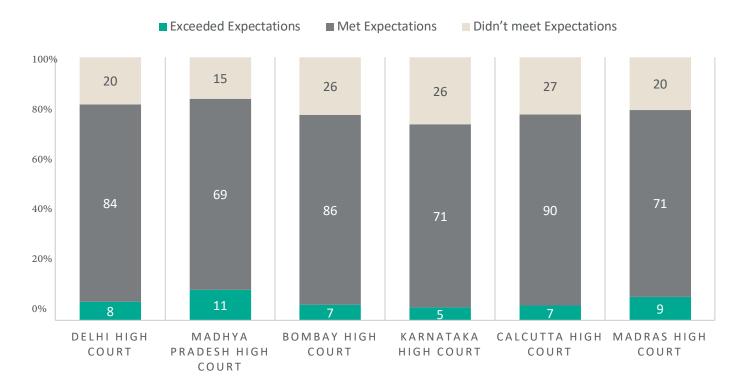


### **Quantity of Information**

## RESPONSES ON QUANTITY OF INFORMATION ON WEBSITE

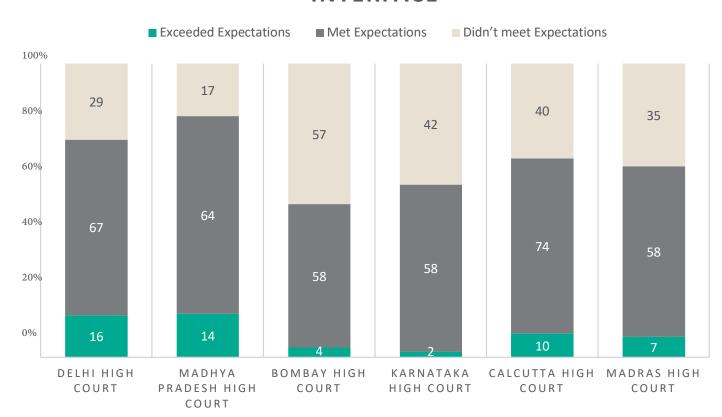


## RESPONSES ON VARIETY OF INFORMATION PRESENT ON WEBSITE

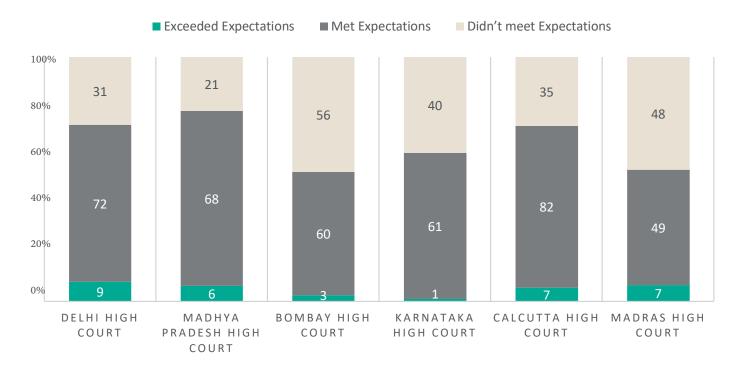


### Ease of use of interface

## RESPONSES ON EASE OF USE OF WEBSITE INTERFACE

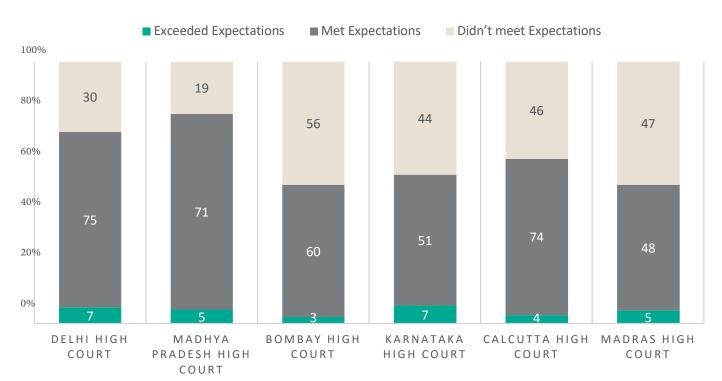


## RESPONSES ON AVAILABILITY OF DOCUMENTATION



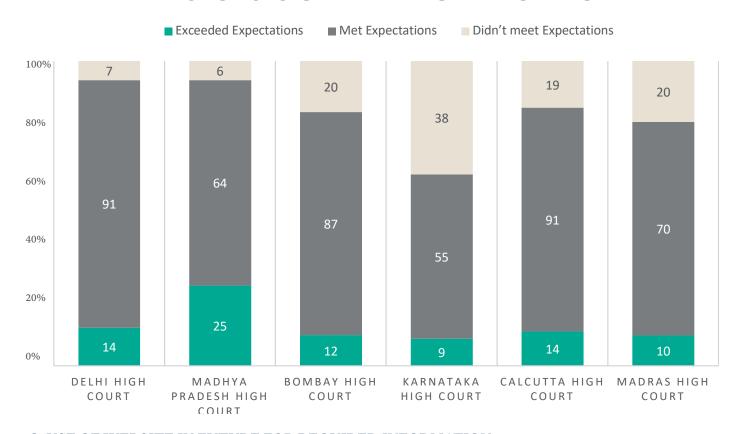
### Availability of contact information

## RESPONSES ON AVAILABILITY OF CONTACT INFORMATION



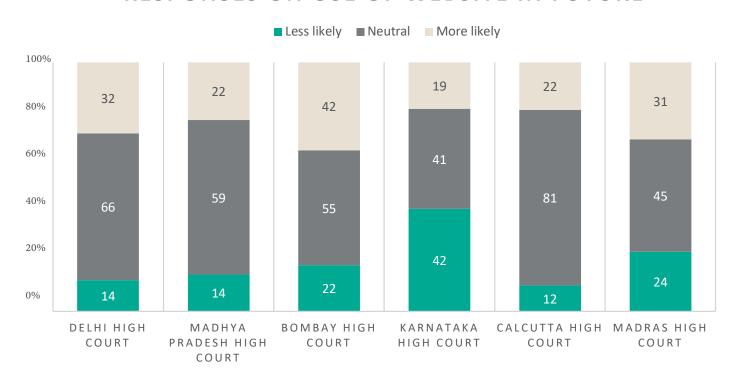
#### 7. RESPONDENTS ON MEETING OVERALL EXPECTATIONS.

### RESPONSES ON MEETING EXPECTATION



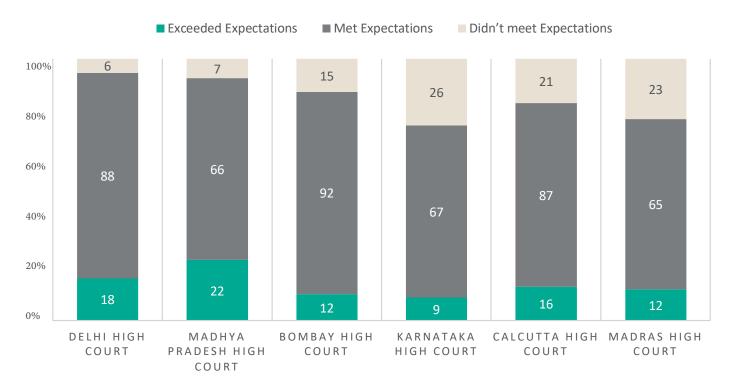
#### 8. USE OF WEBSITE IN FUTURE FOR REQUIRED INFORMATION.

### RESPONSES ON USE OF WEBSITE IN FUTURE



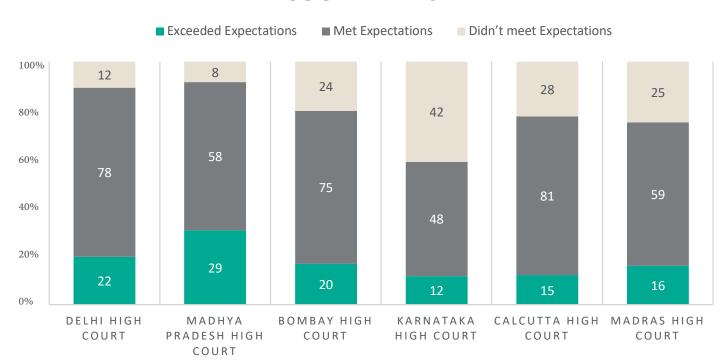
#### 9. RESPONDENTS ON OVERALL EXPERIENCE WITH THE WEBSITE

## RESPONSES ON OVERALL EXPERIENCE WITH THE WEBSITE



#### 10. WHETHER OR NOT THIS WEBSITE GIVES FEEL OF INDIAN HIGH COURT WEBSITE.

## RESPONSES ON GIVING FEEL OF INDIAN HIGH COURT WEBSITE

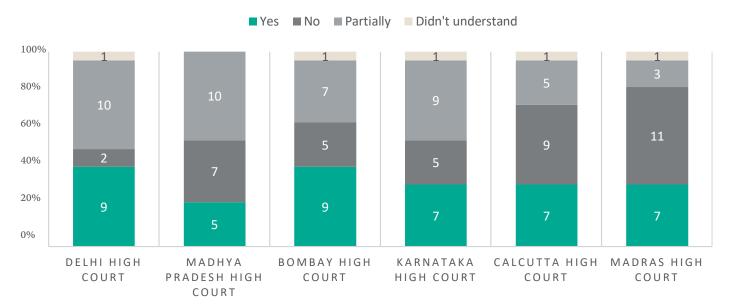


### A.2. Task-based usability test

## Task 1: Download case information of a case of given case type and year.

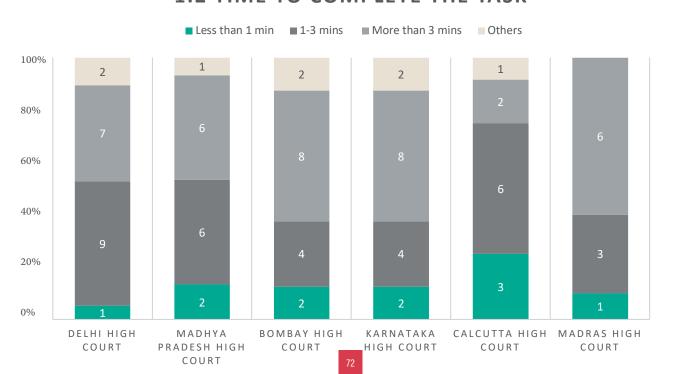
1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

## 1.1 RESPONDENTS COULD COMPLETE THE TASK OR NOT



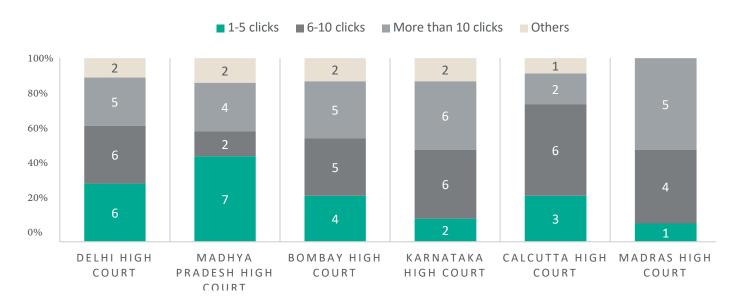
2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

#### 1.2 TIME TO COMPLETE THE TASK



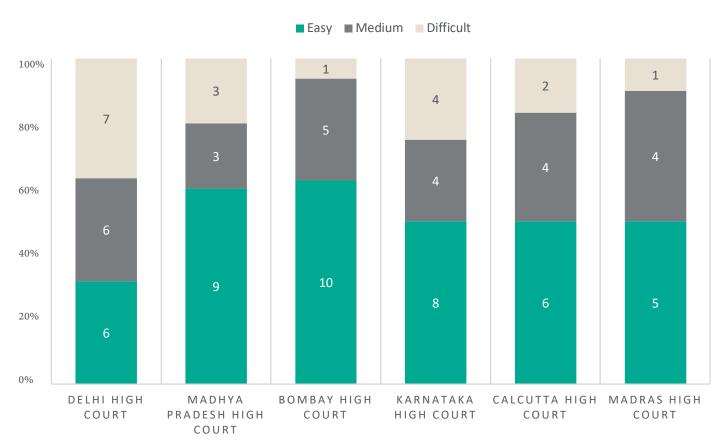
## 3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

# 1.3 NUMBER OF CLICKS TO COMPLETE THE TASK

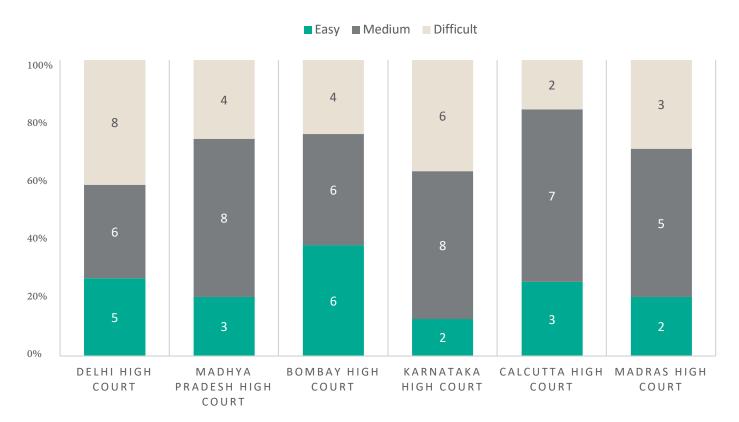


#### 4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK ON THE WEBSITE.

### SECTION FOR THE TASK

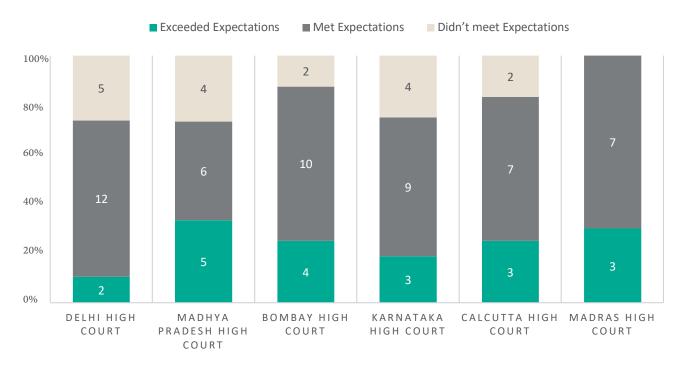


### 1.5 DIFFICULTY IN COMPLETING THE TASK



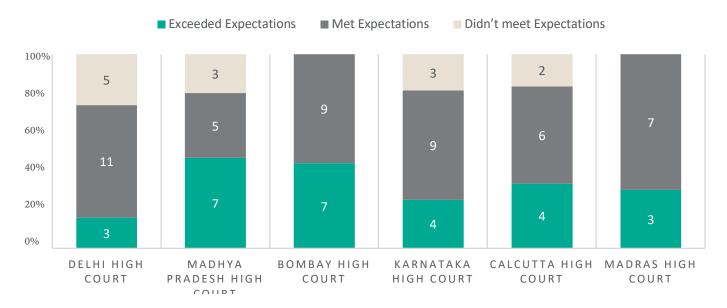
6. RATE THE PRESENTATION OF THE DOWNLOADED CASE INFORMATION OF A CASE. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

## 1.6 PRESENTATION OF THE CASE INFORMATION



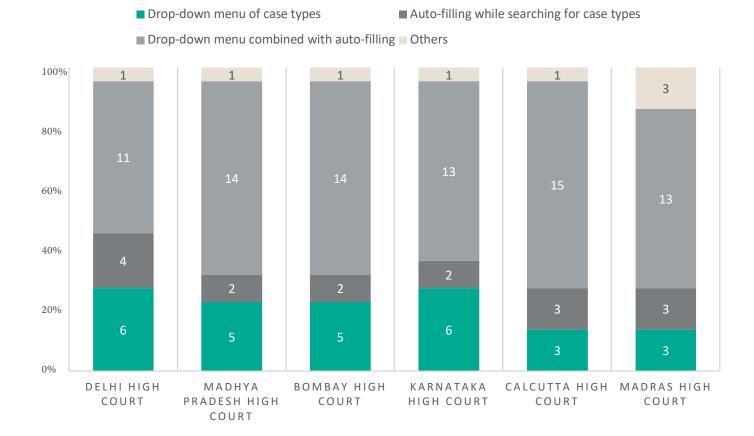
### 7. RATE THE CASE INFORMATION IN TERMS OF DETAILS PROVIDED IN IT.

# 1.7 RESPONDENTS ON DETAILS PROVIDED IN THE CASE INFORMATION



## 8. WHICH IS PREFERRED OUT OF 3 WHILE SEARCHING FOR CASE TYPES ON THE WEBSITE?

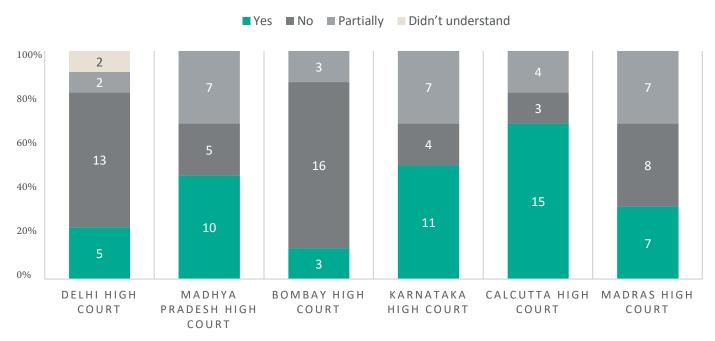
# 1.8 PREFERENCE OF RESPONDENTS ON DIFFERENT OPTIONS FOR CASE-TYPES SEARCH



### Task 2: Download cause list of a court for the given date.

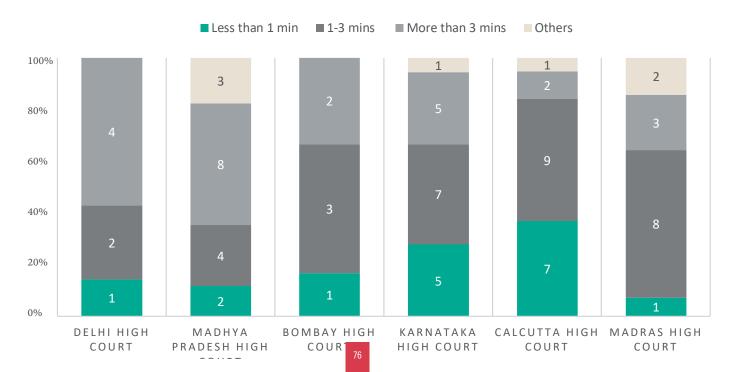
1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

# 2.1 RESPONDENTS COULD COMPLETE THE TASK OR NOT



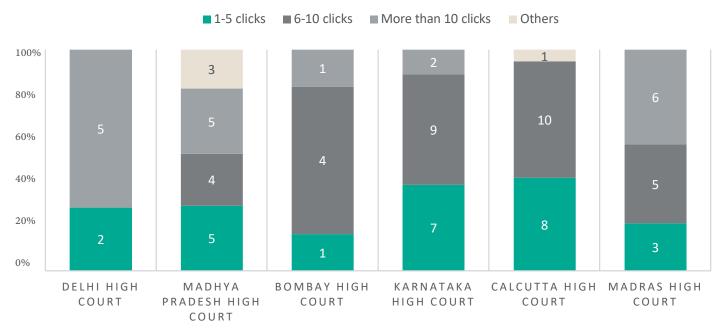
Note: Respondents who said they were able to complete the task for the High Court of Madras answered in the affirmative with respect to being able to find a cause list, though it was not of the older dates as sought in the survey.

## 2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

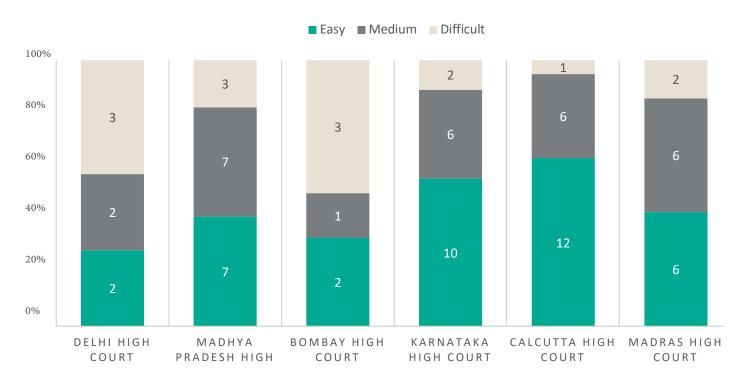


## 3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

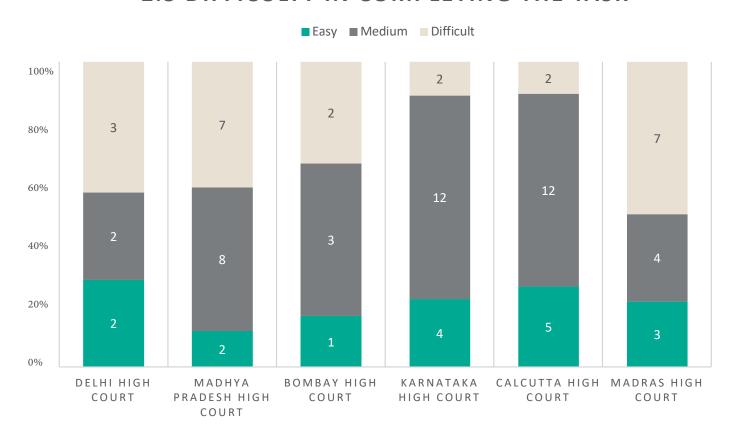
# 2.3 NUMBER OF CLICKS TO COMPLETE THE TASK



#### 4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK

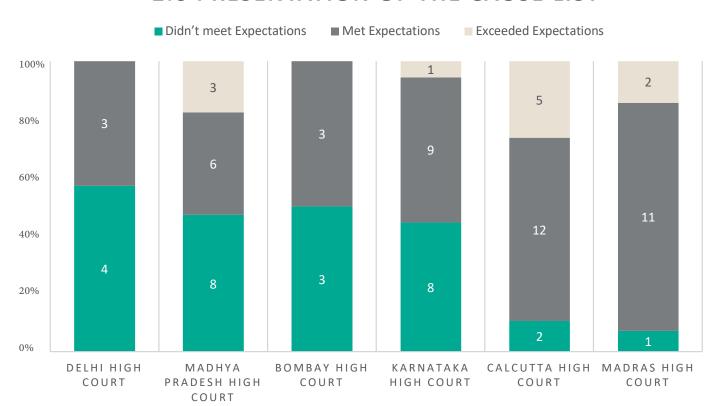


### 2.5 DIFFICULTY IN COMPLETING THE TASK



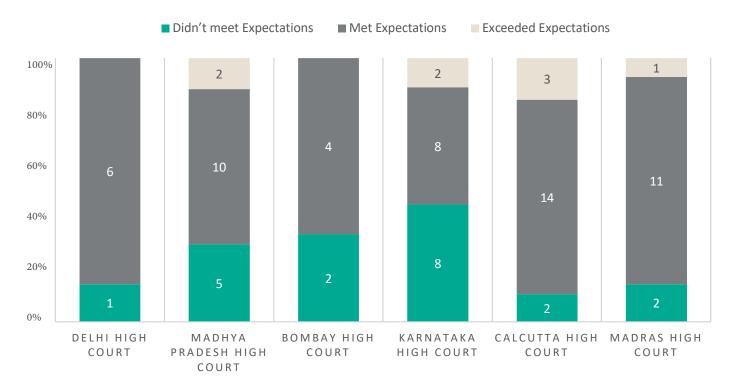
### 6. RATE THE PRESENTATION OF THE CAUSE LIST.

### 2.6 PRESENTATION OF THE CAUSE LIST



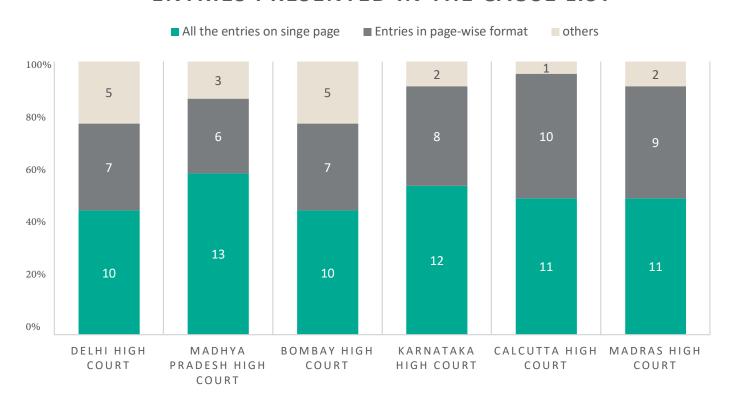
### 7. RATE THE CAUSE LIST IN TERMS OF DETAILS PROVIDED IN IT.

# 2.7 RESPONDENTS ON DETAILS PROVIDED IN THE CAUSE LIST



#### 8. WHICH IS PREFERRED OUT OF 2 FOR PRESENTING ENTRIES IN THE CAUSE LIST?

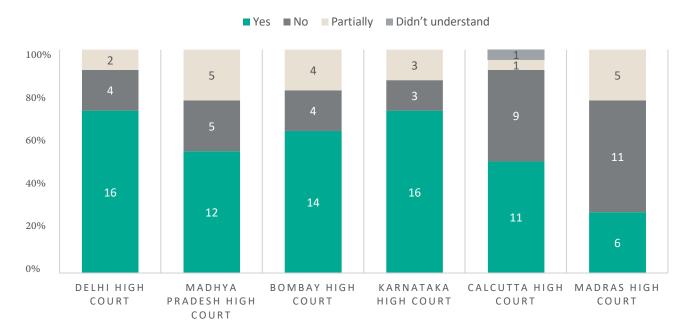
# 2.8 PREFERENCE OF RESPONDENTS ON THE ENTRIES PRESENTED IN THE CAUSE LIST



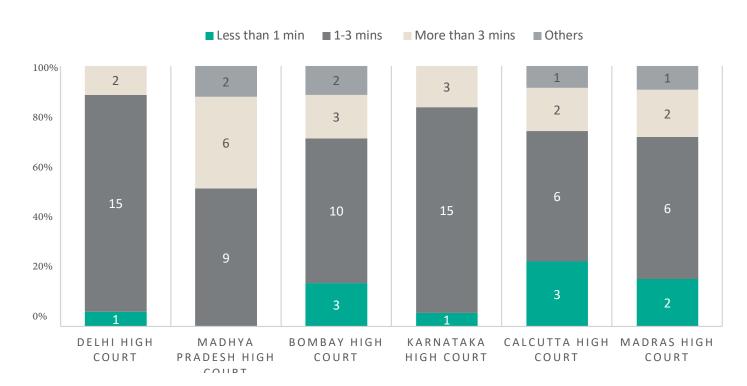
# Task-3: Find out total number of judgments/orders for a given month or day.

1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

## 3.1 RESPONDENTS COULD COMPLETE THE TASK OR NOT

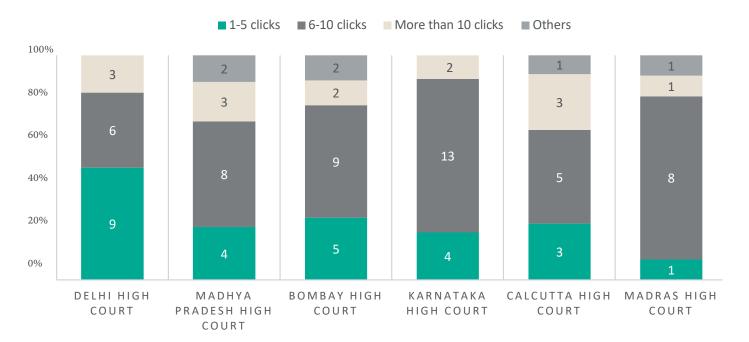


2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

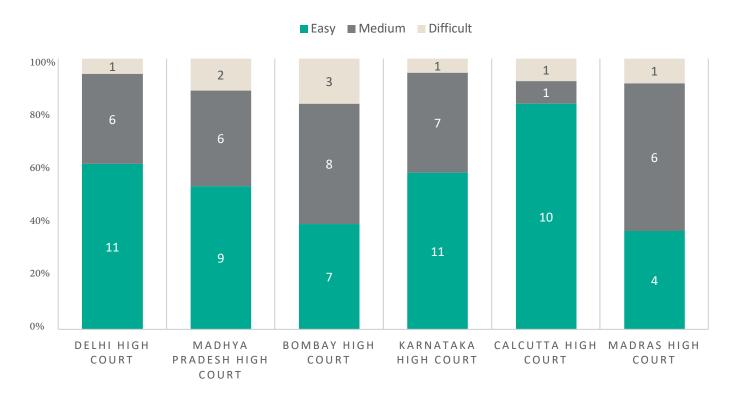


### 3. NUMBER OF CLICKS TO COMPLETE THE TASK.

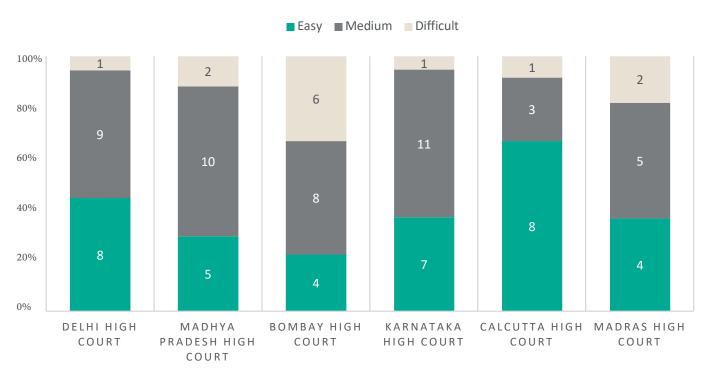
# 3.3 NUMBER OF CLICKS TO COMPLETE THE TASK



#### 4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.



### 3.5 DIFFICULTY IN COMPLETING THE TASK



#### 6. RATE THE PRESENTATION OF THE JUDGMENTS/ORDERS.

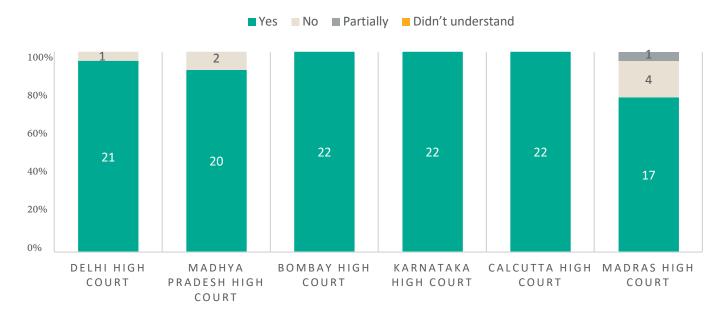
# 3.6 PRESENTATION OF THE JUDGEMENTS/ORDERS



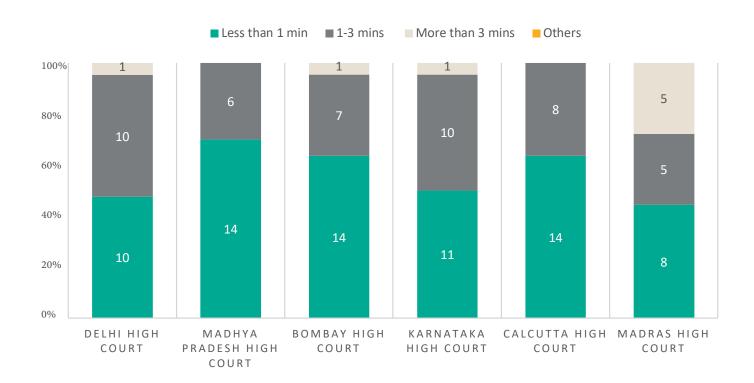
# Task 4: Download latest notification regarding recruitment or careers or exams on the website.

1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

# 4.1 RESPONDENTS COULD COMPLETE THE TASK OR NOT

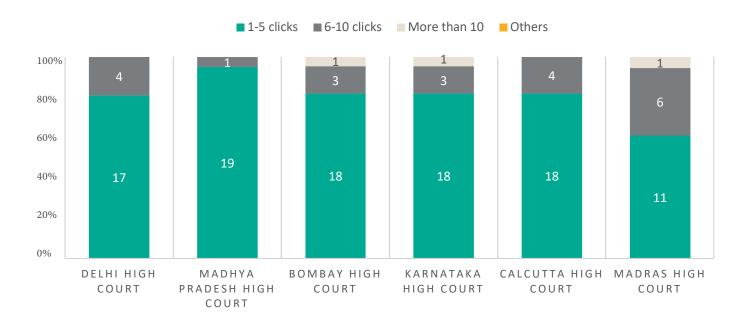


2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

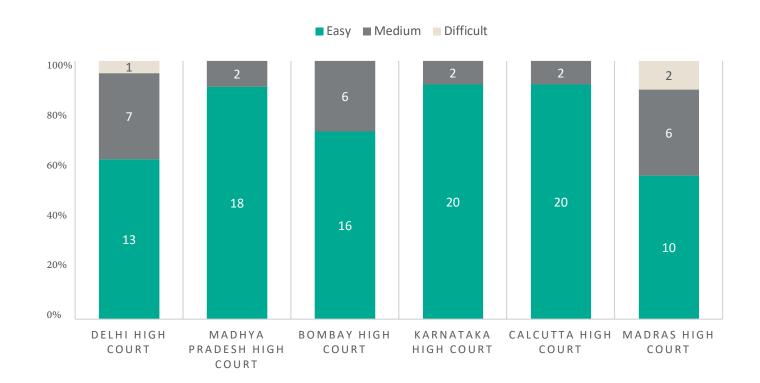


## 3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

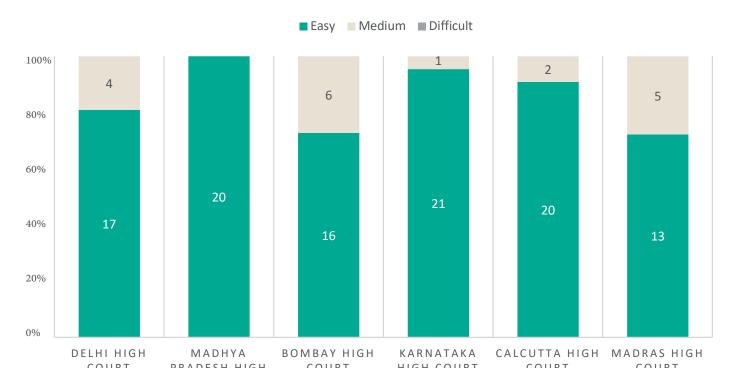
# 4.3 NUMBER OF CLICKS TO COMPLETE THE TASK



4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.

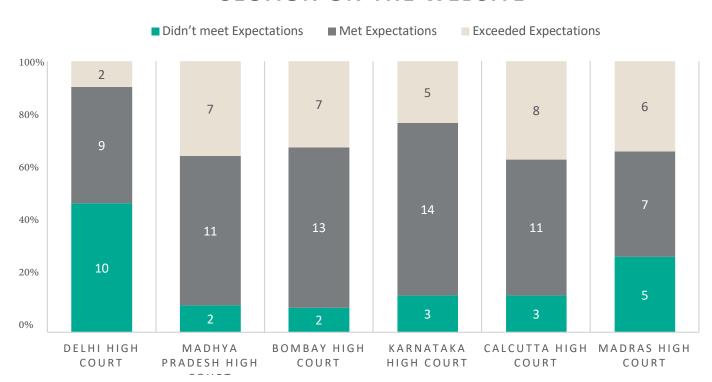


### 4.5 DIFFICULTY IN COMPLETING THE TASK



## 6. RATE THE PLACEMENT OF THE RECRUITMENT/CAREER SECTION ON THE WEBSITE.

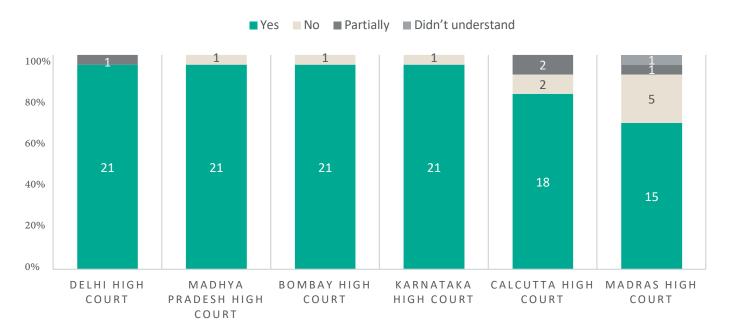
# 4.6 PLACEMENT OF RECRUITMENT/CAREER SECTION ON THE WEBSITE



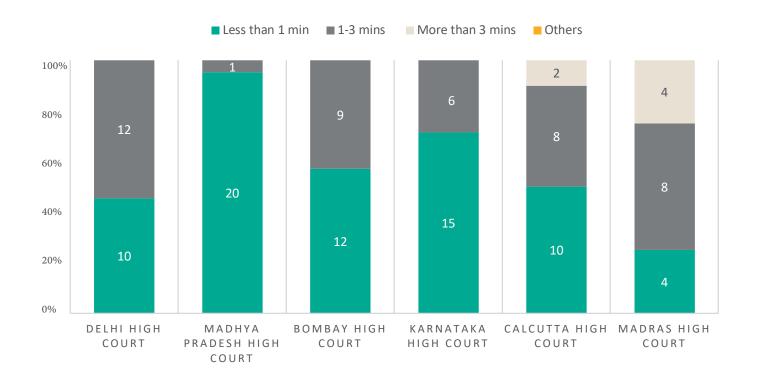
### Task-5: Download latest circular/tender uploaded on the website.

1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

# 5.1 RESPONDENTS COULD COMPLETE THE TASK OR NOT

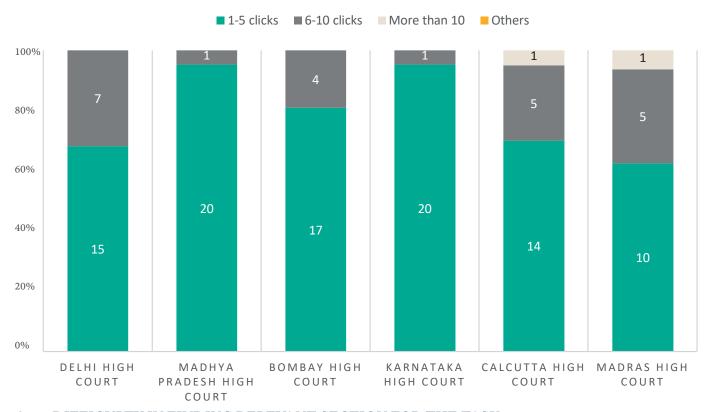


2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

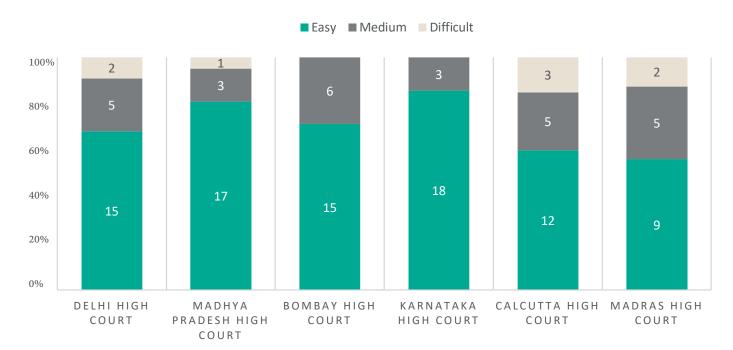


## 3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK)

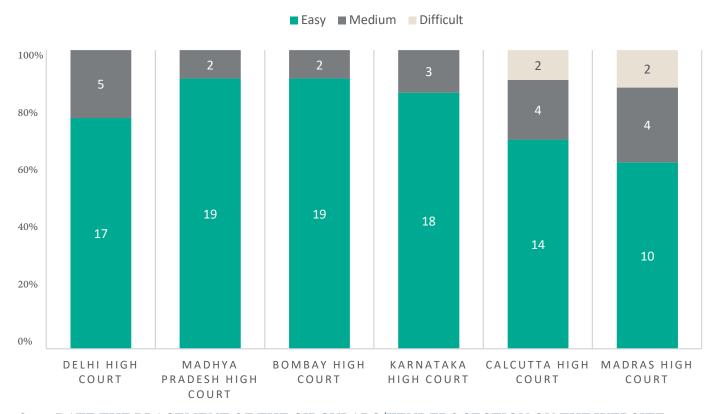
# 5.3 NUMBER OF CLICKS TO COMPLETE THE TASK



4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.

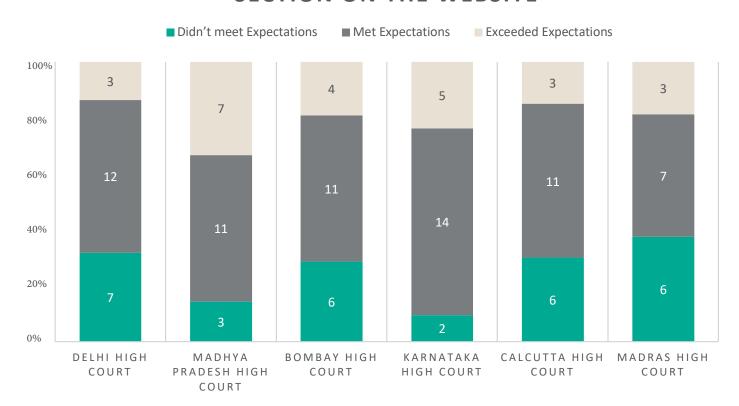


### 5.5 DIFFICULTY IN COMPLETING THE TASK



#### 6. RATE THE PLACEMENT OF THE CIRCULARS/TENDERS SECTION ON THE WEBSITE.

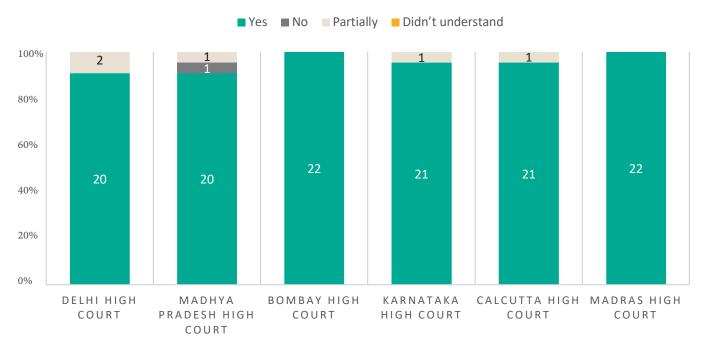
# 5.6 PLACEMENT OF THE CIRCULARS/TENDERS SECTION ON THE WEBSITE



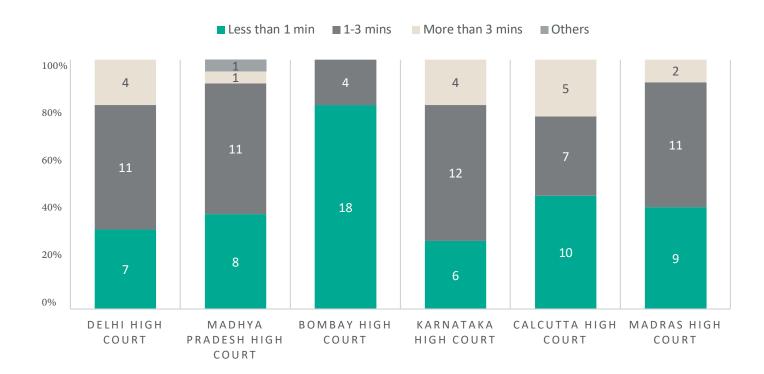
### Task-6: Count the total number of judges of high court.

1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

# 6.1 RESPONDENTS COULD COMPLETE THE TASK OR NOT

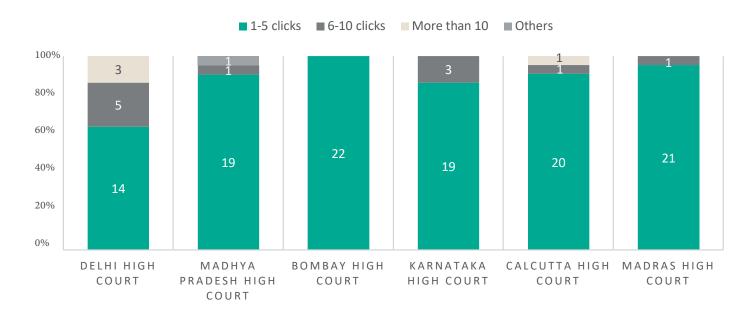


2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

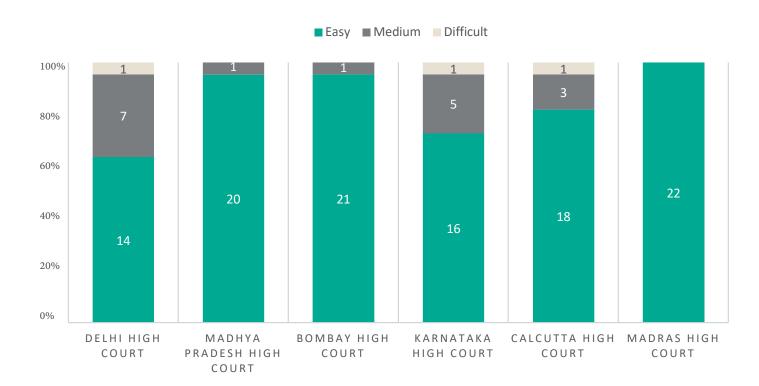


## 3. NO. OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

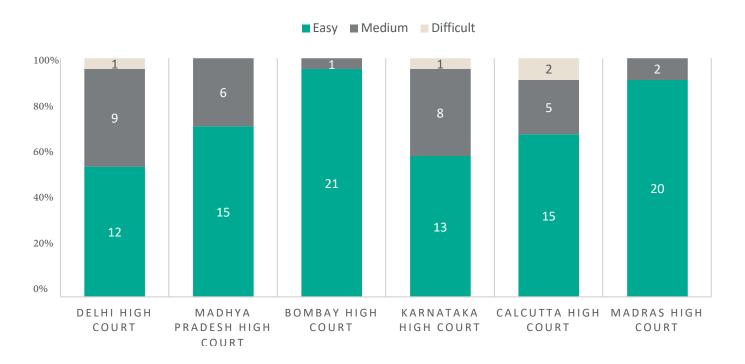
# 6.3 NUMBER OF CLICKS TO COMPLETE THE TASK



#### 4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.



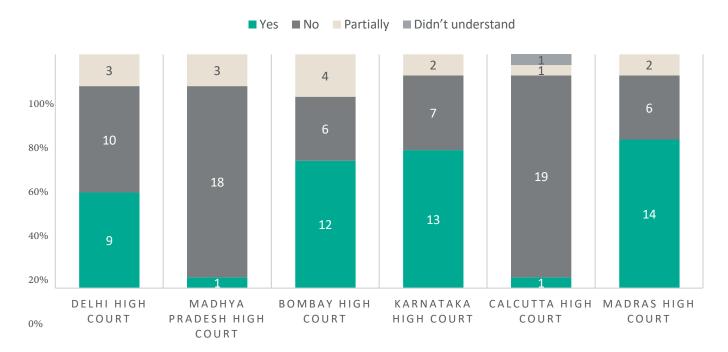
### 6.5 DIFFICULTY IN COMPLETING THE TASK



### Task-7: Retrieve information of RTI officer(s).

#### 1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

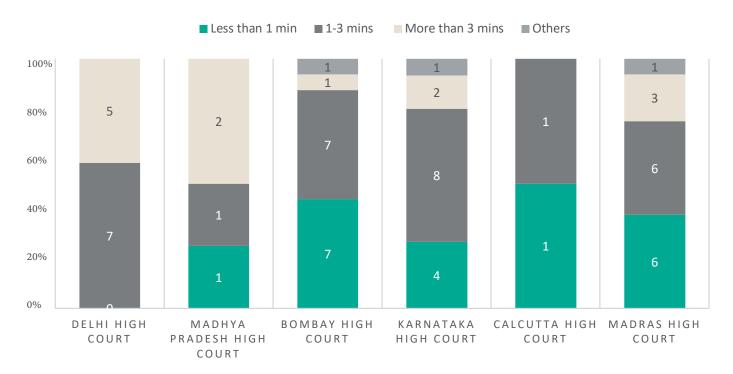




7 Time to complete the test. (Date included of eally these wike were able to complete the

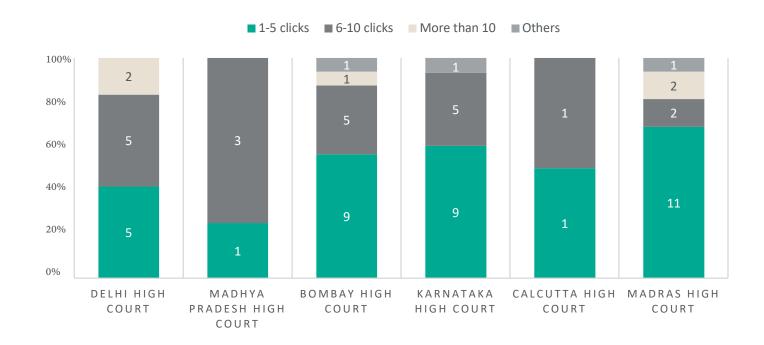
## 2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

### 7.2 TIME TO COMPLETE THE TASK



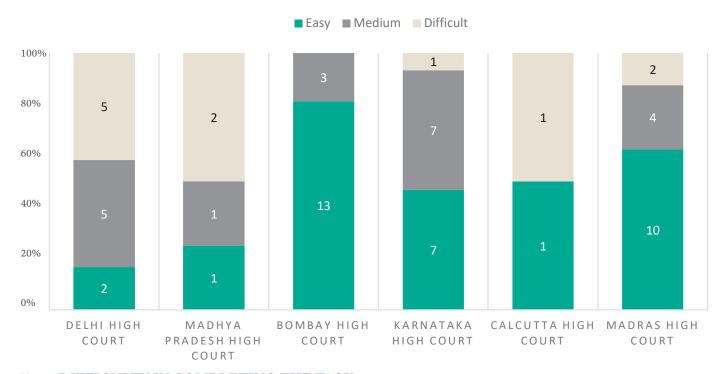
3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

# 7.3 NUMBER OF CLICKS TO COMPLETE THE TASK



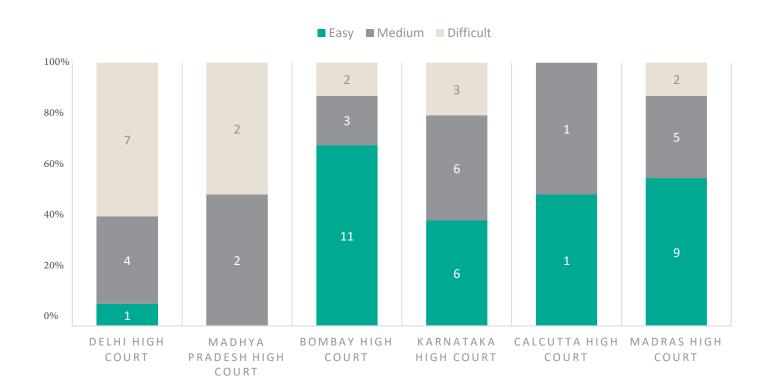
### 4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.

# 7.4 DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK



#### 5. DIFFICULTY IN COMPLETING THE TASK.

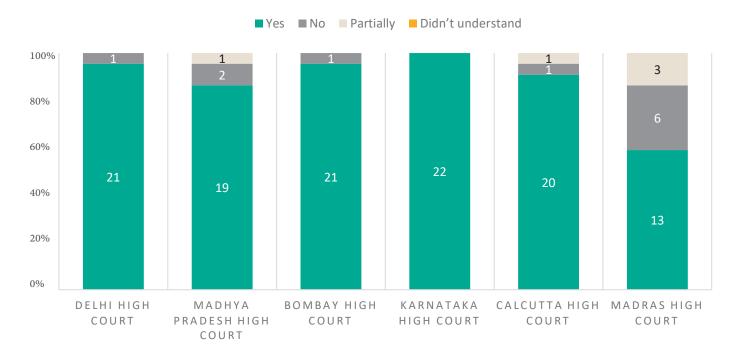
### 7.5 DIFFICULTY IN COMPLETING THE TASK



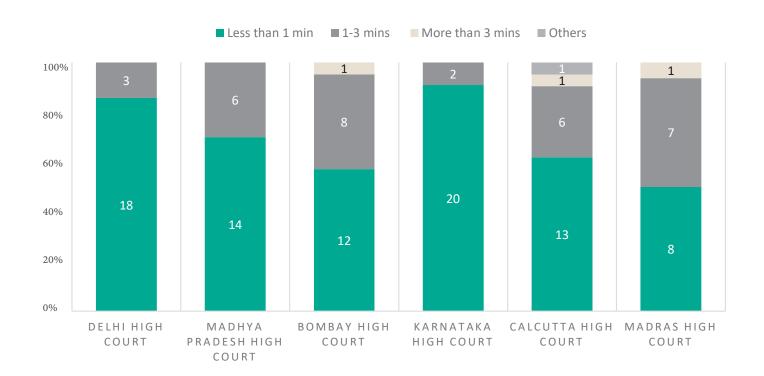
### Task-8: Downloading court calendar of the current year.

1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

# 8.1 RESPONDENTS COULD COMPLETE THE TASK OR NOT

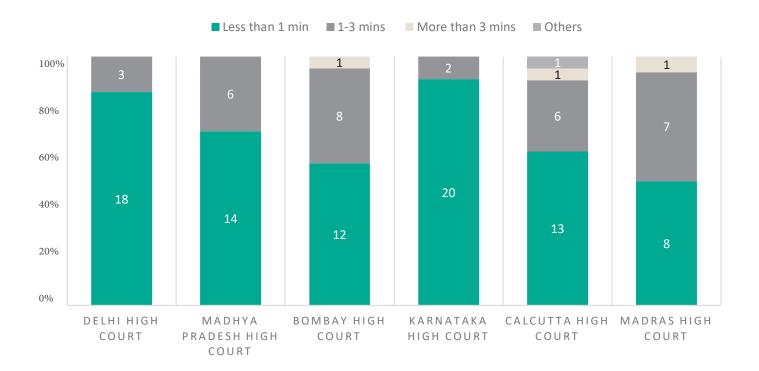


2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

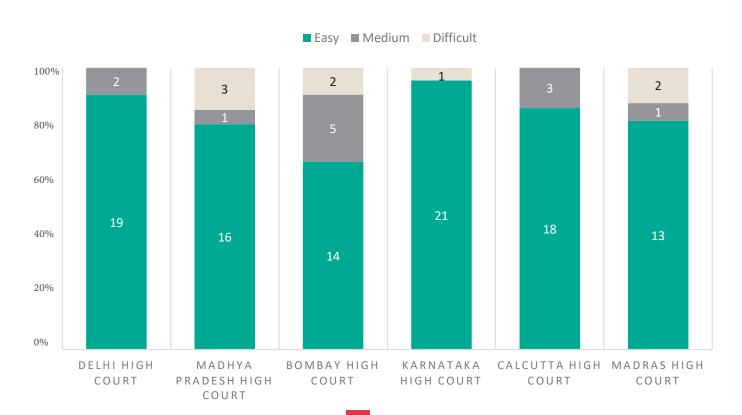


## 3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

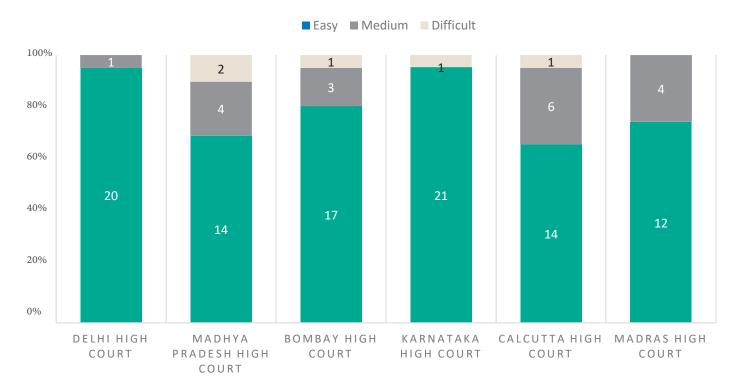
### 8.2 TIME TO COMPLETE THE TASK



### 4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.



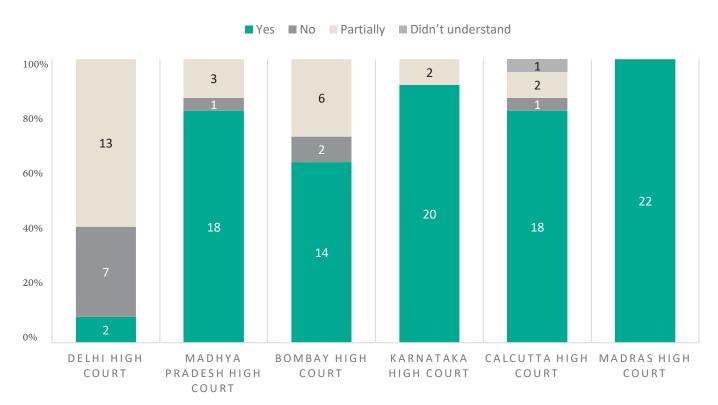
### 8.5 DIFFICULTY IN COMPLETING THE TASK



Task-9: Get the contact information of the court: Telephone No, Email id, address.

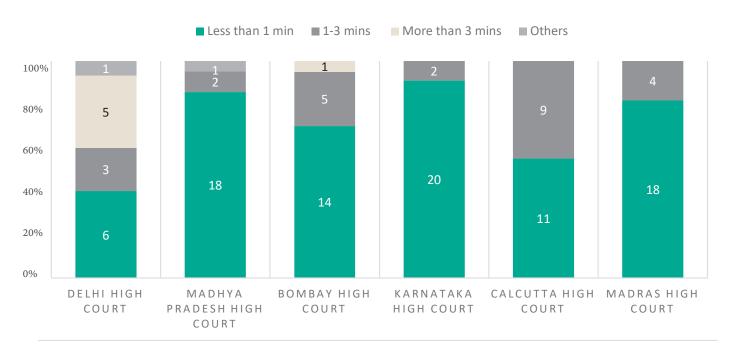
1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

### 9.1 COMPLETION OF THE TASK



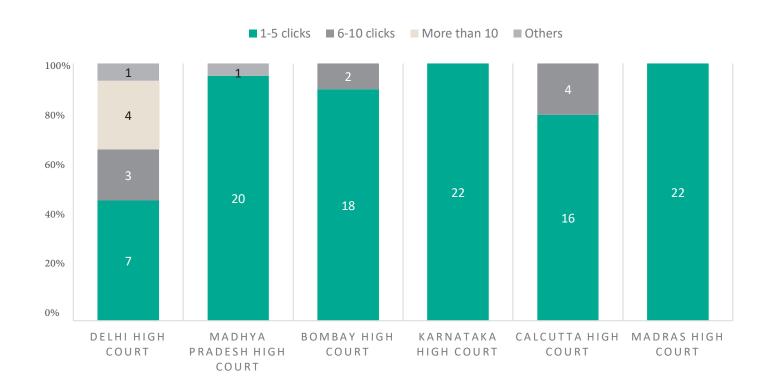
## 2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

### 9.2 TIME TO COMPLETE THE TASK



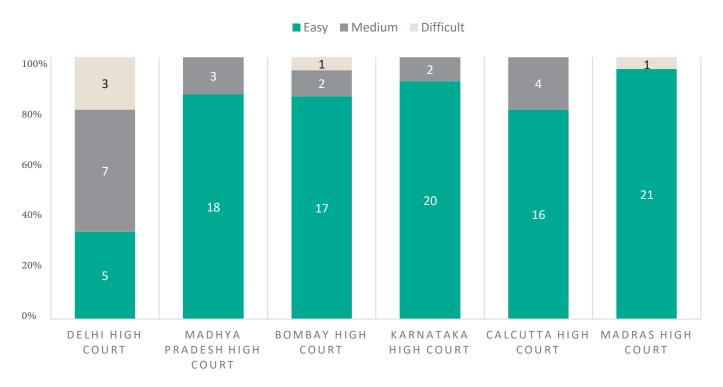
3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

# 9.3 NUMBER OF CLICKS TO COMPLETE THE TASK



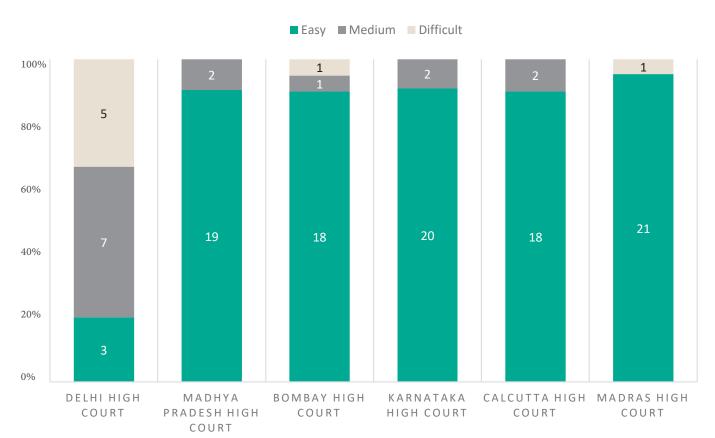
### 4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.

# 9.4 DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK



#### 5. DIFFICULTY IN COMPLETING THE TASK.

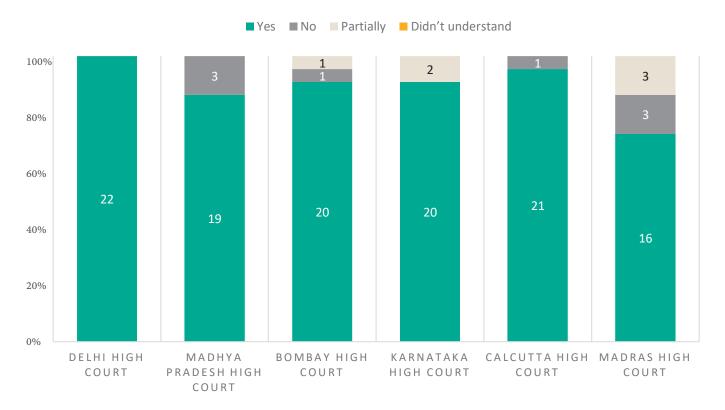
### 9.5 DIFFICULTY IN COMPLETING THE TASK



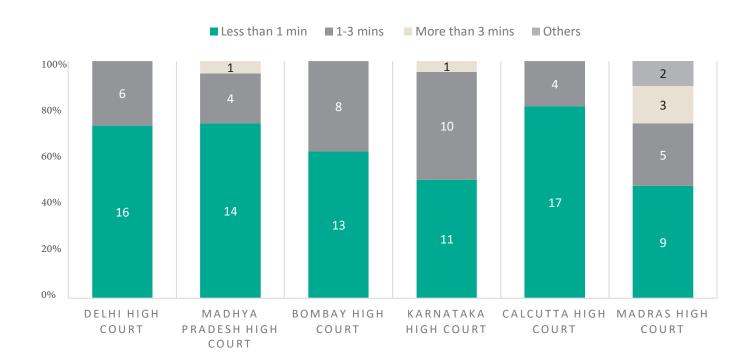
### Task-10: Download latest general notices uploaded on the website.

1. WHETHER RESPONDENTS COULD COMPLETE THE TASK OR NOT.

### 10.1 COMPLETION OF THE TASK

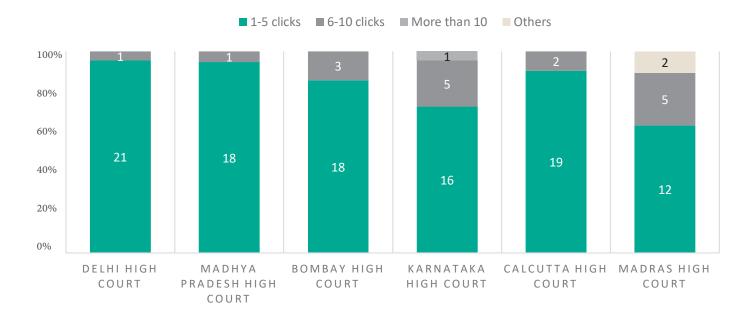


2. TIME TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

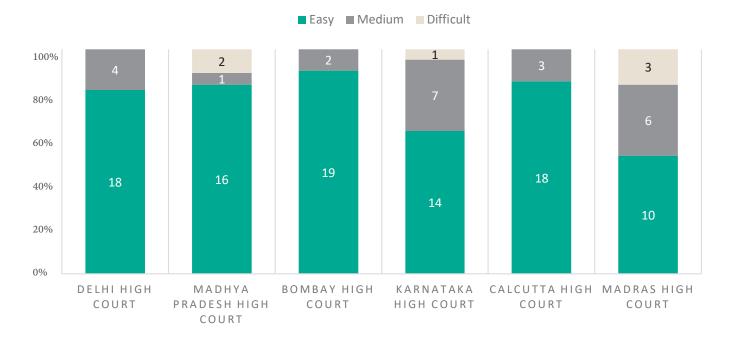


## 3. NUMBER OF CLICKS TO COMPLETE THE TASK. (DATA INCLUDED OF ONLY THOSE WHO WERE ABLE TO COMPLETE THE TASK FULLY OR PARTIALLY)

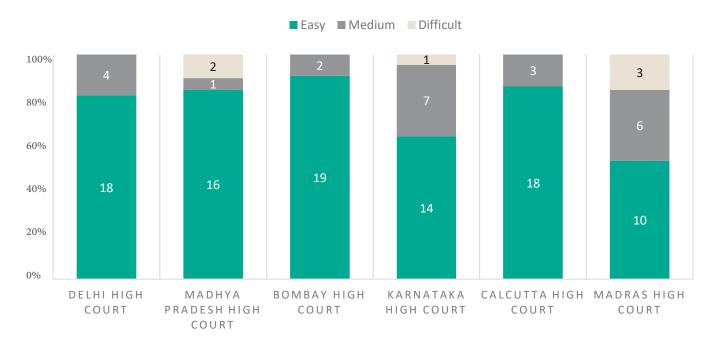
# 10.3 NUMBER OF CLICKS TO COMPLETE THE TASK



4. DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK.



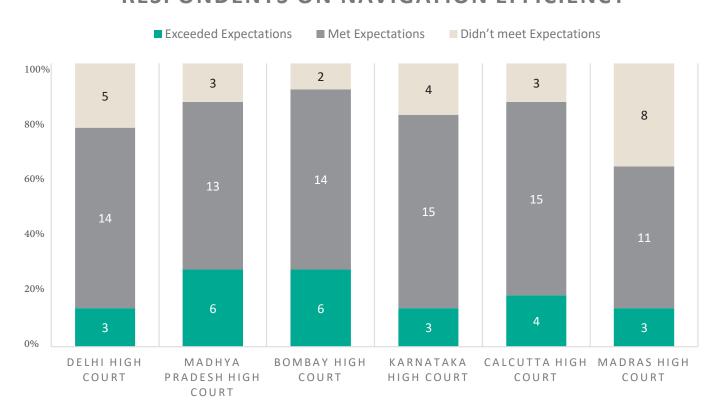
# 10.4 DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASK



### Overall experience on tasks-based usability test

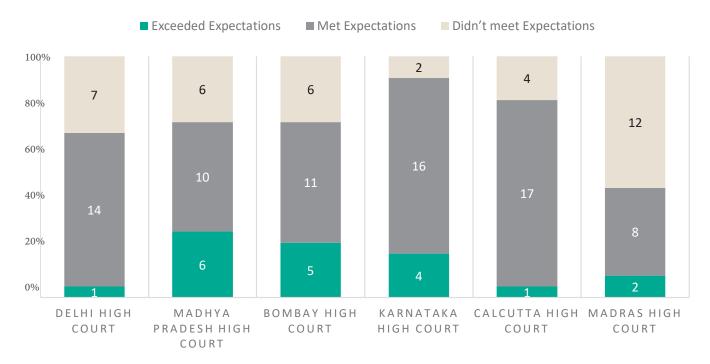
**NAVIGATION EFFICIENCY** 

### **RESPONDENTS ON NAVIGATION EFFICIENCY**



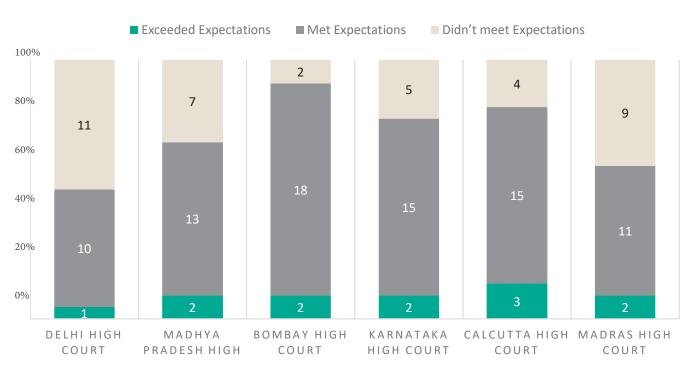
### RATE THE WEBSITE IN TERMS OF SUCCESSFULLY FINDING REQUIRED INFORMATION

# RESPONDENTS ON SUCCESSFULLY FINDING REQUIRED INFORMATION ON THE WEBSITE



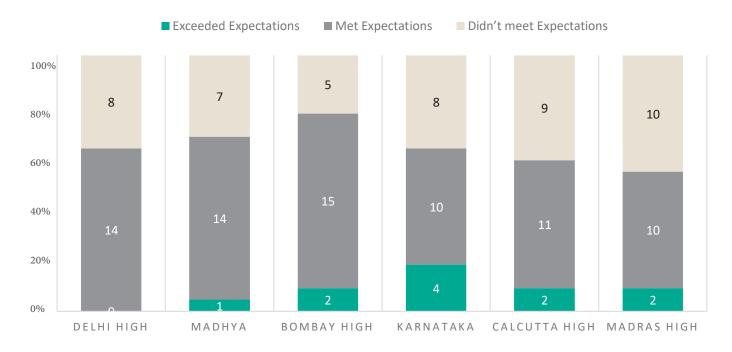
#### RATE THE WEBSITES IN TERMS OF ERROR RECOGNITION AND RECTIFICATION

# RECTIFICATION METHODS PROVIDED ON THE WEBSITE



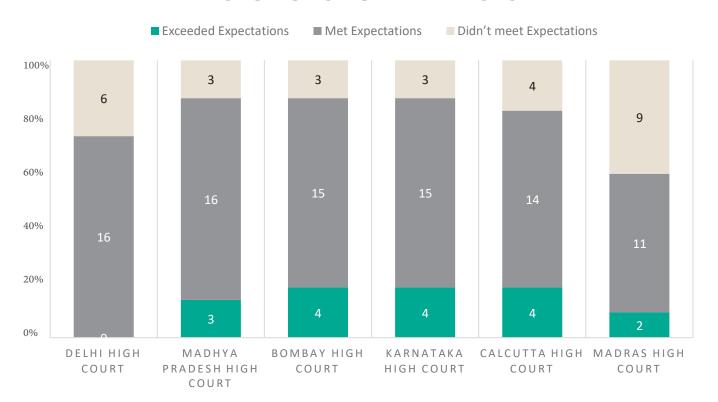
### DOCUMENTATION PROVIDED

# RESPONDENTS ON DOCUMENTATION PROVIDED ON THE WEBSITE



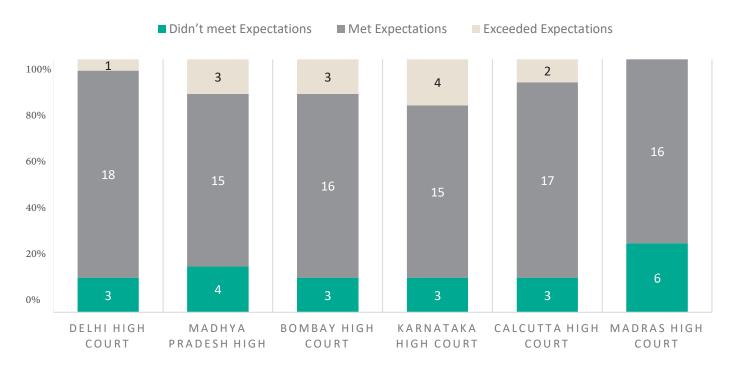
### OVERALL, EASE/DIFFICULTY IN FINDING RELEVANT SECTION FOR THE TASKS

# OVERALL, DIFFICULTY IN FINDING RELEVANT SECTIONS FOR THE TASKS



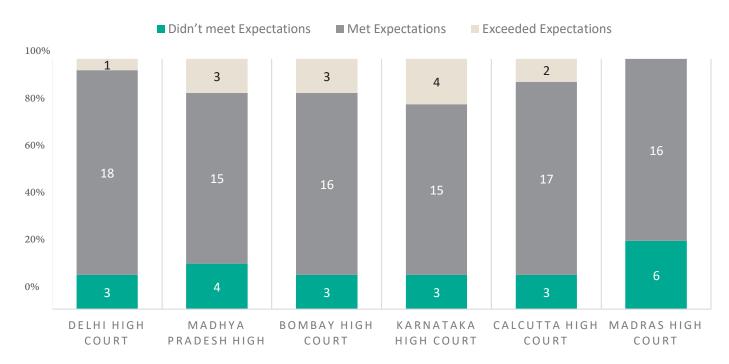
### OVERALL, EASE/DIFFICULTY IN COMPLETING THE TASKS

# OVERALL, DIFFICULTY IN COMPLETING THE TASKS

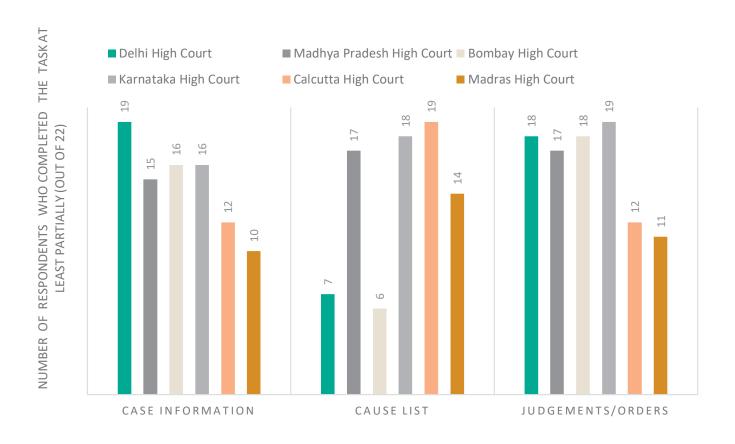


#### OVERALL EXPERIENCE PERFORMING TASKS

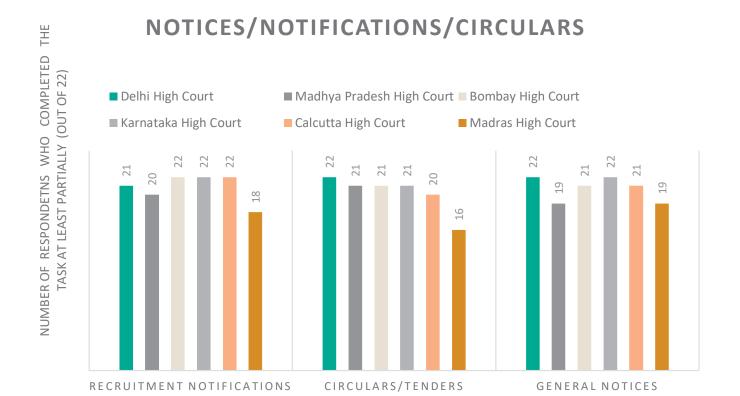
# OVERALL EXPERIENCE WHILE PERFORMING THE TASKS



# CLUSTER 1: CASE-DATA RETRIEVAL SYSTEM OF THE COURT



### **CLUSTER 2: COURT CONTACT INFORMATION** AND RTI RELATED QUERIES NUMBER OF RESPONDETNS WHO COMPLETED THE TASK AT LEAST PARTIALLY (OUT OF 22) ■ Delhi High Court ■ Madhya Pradesh High Court ■ Bombay High Court ■ Karnataka High Court ■ Calcutta High Court ■ Madras High Court 22 22 21 20 NUMBER OF JUDGES RTI OFFICER COURT CALENDER COURT CONTACT INFORMATION INFORMATION



### A.3. Heuristic evaluation

Note on scoring pattern in each table: In every table, 1 score is given for 'Yes' and 0 for 'No.' For some questions scoring is done on 1-3 or 1-5 scale, 1 for being the worst and 3 or 5 for being the best. Also, normalised score out of 1 is given for scale-based questions.

### **Principle 1: Visibility of system status (Usability heuristic)**

#### **COMPARISON TABLE**

1 - Delhi, 2 - Madhya Pradesh, 3 - Bombay, 4 - Karnataka, 5 - Calcutta, 6 - Madras

No	Question	1	2	3	4	5	6
1.	Is a site map given on the home page of the website?	Yes	Yes	Yes	Yes	No	Yes
2.	Does the calendar state on and off days of court?	Yes	Yes	Yes	Yes	Yes	No
3.	Are there any indicators for navigation? E.g., sections and sub-sections are displayed.	Yes	Yes	Yes	Yes	No	No
4.	Are there any indicators to differentiate clickable content from non-clickable?	Yes	Yes	Yes	Yes	Yes	Yes
5.	Are there any indicators for more records than currently visible? E.g., 'more' or 'archive' button?	Yes	Yes	Yes	Yes	Yes	Yes
6.	Are the any indicators to differentiate latest uploaded file? E.g., 'new' or 'latest' symbol against new entry.	Yes	Yes	Yes	Yes	Yes	Yes
7.	Is 'view/download/print' symbol provided for files?	Yes	No	No	No	No	Yes
8.	Are entries in A. 1 to N format on single page or B. page-wise entries. (Answer- A-1 or B-0)	В	А	А	А	А	Α
9.	Are total number entries in a particular section stated on the top?	No	No	No	No	No	No
10.	Is there any information regarding e-case filing provided on the website?	Yes	Yes	Yes	Yes	Yes	Yes
11.	In the e-case filing and recruitment sections, are 'login' or 'new registration' options indicated?	Yes	Yes	Yes	Yes	No	Yes
12.	In the case status section, is a drop-down menu or auto-filling system provided while selecting case type or case year?	Yes	Yes	Yes	Yes	Yes	Yes
13.	In the case status section, are there any indicators to show no data? E.g., 'No case found' or 'No data available'	Yes	Yes	Yes	Yes	Yes	Yes
14.	In the case status section, are there any indicators to show status of the case (pending/disposed off) without going into details of case summary?	Yes	Yes	Yes	Yes	No	No
15.	In the case status section, are month-wise or year- wise summaries of number of registered, pending and disposed cases provided?	No	No	No	No	No	No
16.	In judges/lawyers' section, is tenure/time period of different judges/lawyers given?	Yes	Yes	Yes	Yes	Yes	Yes
17.	Are there any indicators shown while website is loading? Indicators must give clear feedback on status of loading. Looped or percent done indicator.	No	No	No	No	No	No
18.	Is the administrative set up of high court given?	No	Yes	No	No	No	No
	Total score out of 18 (Yes-1, No-0)	13	14	13	13	9	11

### Principle 2: Match between system and the real world

### **COMPARISON TABLE**

1 - Delhi, 2 - Madhya Pradesh, 3 - Bombay, 4 - Karnataka, 5 - Calcutta, 6 - Madras

No	Question	1	2	3	4	5	6
1.	Is there a provision for language change?	No	Yes	No	No	Yes	No
2.	Is the website available in both Hindi and English languages?	No	Yes	No	No	Yes	No
3.	Is the website available in the local state language? Delhi-Hindi, Madhya Pradesh- Hindi, Bombay- Marathi, Karnataka- Kannada, Calcutta- Bengali, Madras- Tamil.	No	Yes	No	No	Yes	No
4.	Is there a provision for zoom in and zoom out? '+' sign for zoom in and '-' sign for zoom out should be present.	Yes	No	No	Yes	Yes	Yes
5.	Are clickable explainers provided against technical words? Words such as roster, cause list, IA status, mediation, caveat, ILR, difference between registration date and filing date, etc.	No	No	No	No	No	No
6.	Are benefits of using e-court over offline court given on the website?	Yes	Yes	No	No	No	Yes
7.	Is the procedure for use of e-court explained via video or text file?	Yes	Yes	Yes	Yes	Yes	Yes
8.	Is contact information including address provided at the bottom of the webpage?	Yes	Yes	Yes	Yes	No	Yes
9.	Are menu bars (top, right and left) provided?	Yes	Yes	Yes	Yes	Yes	Yes
10.	Does PDF content on the website open up in A. new tab or B. same tab? (score: A-1, B-0)	Α	Α	Α	А	Α	В
11.	In the case status, is the status of the case written in this specific colour format: 'Green: pending', 'red: disposed off' and 'green/yellow/blue: fresh registered case'?	Yes	No	No	No	No	No
12.	Are holidays in calendar shown is red colour?	Yes	Yes	Yes	Yes	Yes	Yes
13.	Are real photos of high courts provided on the front page of website?	Yes	Yes	Yes	Yes	Yes	Yes
14.	Is the language used on the website being understood by laymen? (give score from 1-3)	3	3	3	3	3	3
	Normalised score out of 1	1	1	1	1	1	1
15.	Does the website feel like a high court website in general? (give score from 1-5)	5	5	4	4	4	5
	Normalised score out of 1	1	1	0.75	0.75	0.75	1
	Total score (out of 21) (Yes-1, No-0)	17	18	13	14	16	15
	Total score (out of 15)	11	12	7.75	8.75	10.75	9

#### Principle 3: User control and freedom.

#### **COMPARISON TABLE**

1 - Delhi, 2 - Madhya Pradesh, 3 - Bombay, 4 - Karnataka, 5 - Calcutta, 6 - Madras

2. Are previous/next buttons or scroll down menus provided?  3. Does the PDF open up in new tab?  4. Do important links (NJDG, Supreme Court of India, e-court, etc.) provided on the website open in new tab?  5. Is there a way to cancel the registration process in yes yes yes yes yes between on the login window?  6. Are there options to download or view or print a file? (give score 1-3 based on which all are available)  Normalised score out of 1  7. In case retrieval functionality, is there an option to search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are available)  Normalised score out of 1  8. In case retrieval functionality, are there many ways to search for a case? E.g., search by party name, crime no, case types, case acts, FIR number. (give score from 1-5)  Normalised score out of 1  9. Does the back button lead the user to the previous and says yes yes yes yes yes yes yes yes yes y	No	Question	1	2	3	4	5	6
provided?  3. Does the PDF open up in new tab?  4. Do important links (NJDG, Supreme Court of India, e-court, etc.) provided on the website open in new tab?  5. Is there a way to cancel the registration process in between on the login window?  6. Are there options to download or view or print 2 2 2 2 2 2 3 2 3 a file? (give score 1-3 based on which all are available)  Normalised score out of 1 0.50 0.50 0.50 0.50 0.50 0.50  7. In case retrieval functionality, is there an option to search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are available)  Normalised score out of 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.	Are back, next and refresh buttons is provided?	Yes	Yes	Yes	Yes	Yes	Yes
4. Do important links (NJDG, Supreme Court of India, e-court, etc.) provided on the website open in new tab?  5. Is there a way to cancel the registration process in yes yes yes yes yes between on the login window?  6. Are there options to download or view or print 2 2 2 2 2 2 3 a file? (give score 1-3 based on which all are available)  Normalised score out of 1 0.50 0.50 0.50 0.50 0.50  7. In case retrieval functionality, is there an option to search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are available)  Normalised score out of 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	2.	·	Yes	Yes	Yes	Yes	Yes	Yes
e-court, etc.) provided on the website open in new tab?  5. Is there a way to cancel the registration process in Yes Yes Yes Yes Yes between on the login window?  6. Are there options to download or view or print 2 2 2 2 2 2 3 a file? (give score 1-3 based on which all are available)  Normalised score out of 1 0.50 0.50 0.50 0.50 0.50  7. In case retrieval functionality, is there an option to search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are available)  Normalised score out of 1 0 0 1 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0	3.	Does the PDF open up in new tab?	Yes	Yes	Yes	Yes	Yes	Yes
between on the login window?  6. Are there options to download or view or print 2 2 2 2 2 2 a file? (give score 1-3 based on which all are available)  Normalised score out of 1 0.50 0.50 0.50 0.50 0.50 0.50  7. In case retrieval functionality, is there an option to search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are available)  Normalised score out of 1 0 0 1 0 0  8. In case retrieval functionality, are there many ways to search for a case? E.g., search by party name, crime no., case types, case acts, FIR number. (give score from 1-5)  Normalised score out of 1 0.75 1 0.75 0.50  9. Does the back button lead the user to the previous 3 3 3 3 3 page? (Give score from 1-3)  Normalised score out of 1 1 1 1 1 1	4.	e-court, etc.) provided on the website open in new	Yes	Yes	Yes	Yes	Yes	Yes
a file? (give score 1-3 based on which all are available)  Normalised score out of 1  0.50  0.75  0.75  0.75  0.50  0.75  0.75  0.50  0.75	5.		Yes	Yes	Yes	Yes	Yes	Yes
7. In case retrieval functionality, is there an option to search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are available)  Normalised score out of 1 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0	6.	a file? (give score 1-3 based on which all are	2	2	2	2	2	2
search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are available)  Normalised score out of 1  8. In case retrieval functionality, are there many ways 4 5 4 3 5 4 5 4 5 4 5 5 4 5 5 5 5 5 5 5		Normalised score out of 1	0.50	0.50	0.50	0.50	0.50	0.50
<ul> <li>8. In case retrieval functionality, are there many ways to search for a case? E.g., search by party name, crime no., case types, case acts, FIR number. (give score from 1-5)</li> <li>Normalised score out of 1</li> <li>9. Does the back button lead the user to the previous 3 3 3 3 3 page? (Give score from 1-3)</li> <li>Normalised score out of 1</li> <li>1 1 1 1</li> </ul>	7.	search cases year-wise, month-wise and day-wise? (give score 1-3 based on how many options are	1	1	3	1	1	1
to search for a case? E.g., search by party name, crime no., case types, case acts, FIR number. (give score from 1-5)  Normalised score out of 1  9. Does the back button lead the user to the previous  page? (Give score from 1-3)  Normalised score out of 1  1 1 1		Normalised score out of 1	0	0	1	0	0	0
9. Does the back button lead the user to the previous 3 3 3 3 3 page? (Give score from 1-3)  Normalised score out of 1 1 1 1 1	8.	to search for a case? E.g., search by party name, crime no., case types, case acts, FIR number. (give	4	5	4	3	5	5
page? (Give score from 1-3)  Normalised score out of 1 1 1 1 1 1		Normalised score out of 1	0.75	1	0.75	0.50	1	1
	9.	·	3	3	3	3	3	3
Total score (out of 19) (Yes-1, No-0) 15 16 17 14 10		Normalised score out of 1	1	1	1	1	1	1
, , , , ,		Total score (out of 19) (Yes-1, No-0)	15	16	17	14	16	16
Total score (out of 9) 7.25 7.5 8.25 7 7.5		Total score (out of 9)	7.25	7.5	8.25	7	7.5	7.5

#### **Principle 4: Consistency and standards**

#### **COMPARISON TABLE**

No	Question	1	2	3	4	5	6
1.	Is the website layout same in mobile and desktop?	No	No	Yes	Yes	No	No
2.	Is all the information provided on desktop version also present on mobile version?	Yes	Yes	Yes	Yes	Yes	Yes
3.	Does the website connect the user with other important website links?	Yes	Yes	Yes	Yes	Yes	Yes
4.	Does the website have a top menu and left and right bars?	Yes	Yes	Yes	Yes	No	Yes

No	Question	1	2	3	4	5	6
5.	Is the contact information and copyright information provided at the bottom of the website?	Yes	Yes	Yes	Yes	Yes	Yes
6.	Are the announcements such as circulars/notifications/tenders provided on the right-side bar?	Yes	No	Yes	Yes	Yes	Yes
7.	Is the general information (court history, judges, annual court report, rules, calendar, etc.) provided on the leftside bar?	No	Yes	No	Yes	No	Yes
8.	Is the case data retrieval functionality provided on the top menu?	No	Yes	No	Yes	Yes	No
9.	Is case data in the system updated regularly and on time?	Yes	Yes	Yes	Yes	Yes	Yes
10.	Are photographs of the court provided in the middle of the front page?	Yes	Yes	Yes	Yes	Yes	Yes
11.	Are design, colour and font size of the interconnected webpages similar?	Yes	Yes	Yes	Yes	Yes	Yes
12.	In case data retrieval, is CAPTCHA provided?	Yes	Yes	Yes	No	Yes	Yes
13.	Does the website offer the following core functionalities? i) case data retrieval, (ii) general information (e.g., history, photographs), iii) notifications and circulars (e.g., roster changes), iv) court business (e.g., recruitment, tenders), and v) e-court vi) use of website for public notices (give score from 1-6)	6	6	6	6	6	6
	Normalised score out of 1	1	1	1	1	1	1
14.	Does the website offer i) case status ii) cause list iii) judgments/orders iv) caveat information? (give score from 1-4)	3	4	4	3	3	3
	Normalised score out of 1	0.66	1	1	0.66	0.66	0.66
15.	Are all the other important links provided? (E.g., NJDG, supreme court of India, district court, Indian court, other high courts, e-courts, and other court related links)(give score from 1-5)	5	2	5	5	3	4
	Normalised score out of 1	1	0.25	1	1	0.50	0.75
16.	In case data retrieval, is there a 'standard' maintained for CAPTCHA? CAPTCHA should not impede the speed of operation and must provide security against malicious attack. (rate CAPTCHA from 1-5). Standards for score 5 includes CAPTCHA of combination of 0-9, A-Z with 5-6 letters.	4	4	5	2	4	4
	Normalised score out of 1	0.75	0.75	1	0.25	0.75	0.75
17.	Does the case summary include all information the user may want: viz., case number, case status, filing date, registration date, litigants, advocates, hearing dates, filing dates, hearing details, filing details, judge(s), next hearing date, etc. (give score from 1-6) (6 means all points above are included, 0.5 point for each point)	5.5	6	6	5	6	6
	Normalised score out of 1	0.9	1	1	0.80	1	1
18.	How is the standard of the cause list provided? Does it include all information the user might want: viz., case number, litigants, advocates, date, court number, name of judge(s), bench of HC, VC or physical hearing, fresh and supplementary matters separated, and stage of case. (give score from 1-5) (5 means all points above are included, 0.5 point for each point)	3	2	4	4	4	4
	Normalised score out of 1	0.50	0.25	0.75	0.75	0.75	0.75

No	Question	1	2	3	4	5	6
19.	How is the display of the judgments/orders provided?  Does it include all information the user might want: viz.,  Date of order, upload date, view/download file, number of pages, and name of judge(s)/ Coram. (give score from 1-5) (5 means all points above are included, 1 point for each point)	5	4	5	5	5	5
	Normalised score out of 1	1	0.75	1	1	1	1
20.	How do you rate the internal consistency and design standard of the website? (give score: Very Bad-1, Bad-2, Good-3, Very Good-4, and Excellent-5)	4	4	4	4	3	3
	Normalised score out of 1	0.75	0.75	0.75	0.75	0.50	0.50
	Total score (out of 53) (Yes-1, No-0)	43.5	42	49	45	43	45
	Total score (out of 20)	15.56	15.75	17.5	17.21	15.16	16.41

### **Principle 5: Error prevention**

#### **COMPARISON TABLE**

No	Question	1	2	3	4	5	6
1.	*Are suggestions provided through auto-fill while searching for anything on the website?	No	No	No	No	No	No
2.	In case retrieval, are users restricted to selecting date/ year only up to present date/year?	Yes	Yes	Yes	No	No	No
3.	In login window, when incorrect credentials are entered, is it clearly shown which one out of username and password is wrong?	No	No	No	No	Yes	No
4.	In login window, is an alert provided when user tries to login without registration?	Yes	No	Yes	No	No	No
5.	Is format of CNR No., diary No., and crime no. to be entered shown by clickable explainers or as e.g., in the background?	No	No	No	Yes	No	Yes
6.	Is any warning/alert given when a PDF is going to open in new tab or print window?	No	No	No	No	No	Yes
7.	In case retrieval, is an alert given when the user clicks on the submit button without filing all the information?	No	Yes	Yes	Yes	Yes	Yes
8.	Are judgments/orders, lower court details, etc. provided in the A. case summary or B. separate sections? (Give score A-1, B-0)	Α	А	А	А	А	А
9.	In the case retrieval section, is a default date/year provided?	Yes	Yes	Yes	No	No	No
10.	Do user expectations of completing a task in certain of number of clicks and in certain time match? (Give score from 1 to 5)	4	5	3	5	5	4
	Normalised score out of 1	0.75	1	0.50	1	1	0.75
11.	Are different sections positioned according to user expectations on the website interface? (give score from 1-5)	4	5	4	4	4	4
	Normalised score out of 1	0.75	1	0.75	0.75	0.75	0.75
12.	Is the website consistent across its multiple webpages? (Give score from 1 to 5)	4	4	4	4	3	3
	Normalised score out of 1	0.75	0.75	0.75	0.75	0.50	0.50
	Total score (out of 24 ) (Yes-1, No-0)	16	18	16	16	15	15
	Total score (out of 12)	6.25	6.75	7	5.5	5.25	6

<sup>\*</sup> Repeated question as it's relevant to more than one IDP

#### **Principle 6: Recognition rather than recall**

#### **COMPARISON TABLE**

1 - Delhi, 2 - Madhya Pradesh, 3 - Bombay, 4 - Karnataka, 5 - Calcutta, 6 - Madras

No	Question	1	2	3	4	5	6
1.	*Are suggestions provided through auto-fill while searching for anything on the website?	No	No	No	No	No	No
2.	Is a drop-down menu provided whenever necessary?	Yes	Yes	Yes	Yes	Yes	Yes
3.	Are names of different sections stated clearly on the front page of the website?	Yes	Yes	Yes	Yes	Yes	Yes
4.	In login window, is an option for password or username hint provided?	No	No	No	No	No	No
5.	Is there a provision to mark some section(s) or content of the website as 'important' or 'favourite'?	No	No	No	No	No	No
6.	Is there a provision to see history of the recent activities performed on the website?	No	No	No	No	No	No
7.	In recruitment section, is the deadline for applications or forms highlighted?	No	No	No	No	No	No
8.	Is a navigation path provided on the top of the website?	Yes	No	No	Yes	No	No
9.	Are dates mentioned against notifications, notices or circulars?	Yes	Yes	Yes	Yes	Yes	Yes
10.	Is 'new/old' mentioned against notifications, notices or circulars?	Yes	Yes	Yes	Yes	Yes	Yes
11.	Is a site map provided on the homepage?	Yes	Yes	Yes	Yes	No	Yes
	Total Score (out of 11) (Yes-1, No-0)	6	5	5	6	4	5

<sup>\*</sup> Repeated question as it's relevant to more than one IDP

#### Principle 7: Flexibility and efficiency of use

#### **COMPARISON TABLE**

No	Question	1	2	3	4	5	6
1.	Are shortcuts provided to go to the main sections of the website? (Main sections such as case status, cause list, judgments, notice, etc.)	No	No	No	No	No	No
2.	Does 'ctrl + s' shortcut work for saving any html page within the website?	Yes	Yes	Yes	Yes	Yes	Yes
3.	Is the homepage logo clearly accessible from every web page, and does clicking it take the user to the homepage?	Yes	Yes	Yes	Yes	Yes	Yes
4.	Are shortcuts (if any) displayed beside the corresponding menu label?	No	No	No	No	No	No
5.	Is a list of the shortcuts provided in the help and documentation section?	No	No	No	No	No	No
6.	Is there any type of personalisation provided on the website? Here, personalisation means access to see more or less information as per user login credentials.	No	No	No	No	No	No
7.	Is there an option to look for personalised content based on user's background? E.g., judicial officials can choose to display different content on the website as compared to non-judicial people.	No	No	No	No	No	No

No	Question	1	2	3	4	5	6
8.	Is there more than one way to reach the section of court's main functionalities such as, e-filling, case status, virtual court, cause list, judgments, notices, etc.? (Give score from 1 to 5)	4	2	4	4	1	3
	Normalised score out of 1	0.75	0.25	0.75	0.75	0	0.50
	Total score (out of 12) (Yes-1, No-0)	6	4	6	6	3	5
	Total score (out of 8)	2.75	2.25	2.75	2.75	2	2.5

#### 8: Aesthetic and minimalist design

#### **COMPARISON TABLE**

gradients and highlights) provided on the interface?  2. Are there any clues/signifiers (i.e., elements appear sunken or raised) provided for the clickable and to-be-filled elements?  3. Is clickable and non-clickable content clearly identified via change of colour, underlining content, raised buttons, highlighting text, etc.? (Give score from 1 to 5, 1 point for each, top, bottom, left, right, centre)  Normalised score out of 1  4. Is history section include information related to court establishment, former judges, former registrar, constitution of India, and old photos/videos gallery? (Give score from 1 to 5)  Normalised score out of 1  5. Is principle of scaling of content used properly on the website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size) (Give score from 1 to 3)  Normalised score out of 1  5. How would you rate the colour (background and foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)	No	Question	1	2	3	4	5	6
sunken or raised) provided for the clickable and to-be-filled elements?  3. Is clickable and non-clickable content clearly identified via change of colour, underlining content, raised buttons, highlighting text, etc.? (Give score from 1 to 5, 1 point for each, top, bottom, left, right, centre)  Normalised score out of 1 0.50 0.75 0.75 0.50 0.75 0.50  At 1 shistory section include information related to court establishment, former judges, former registrar, constitution of India, and old photos/videos gallery? (Give score from 1 to 5)  Normalised score out of 1 0.50 0.50 0.75 0.50 0.50 0.50 0.50  Normalised score out of 1 0.50 0.50 0.75 0.50 0.50 0.50 0.50  Sprinciple of scaling of content used properly on the website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size) (Give score from 1 to 3)  Normalised score out of 1 0.50 0.50 1 0.50 0.50 0.50 0.50  Normalised score out of 1 0.50 0.50 0.50 0.50 0.50 0.50  Normalised score out of 1 1 0.50 0.50 0.50 0.50 1 0.50 0.50 0.5	1.		No	No	No	No	No	No
via change of colour, underlining content, raised buttons, highlighting text, etc.? (Give score from 1 to 5, 1 point for each, top, bottom, left, right, centre)  Normalised score out of 1  4. Is history section include information related to court establishment, former judges, former registrar, constitution of India, and old photos/videos gallery? (Give score from 1 to 5)  Normalised score out of 1  5. Is principle of scaling of content used properly on the website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size) (Give score from 1 to 3)  Normalised score out of 1  6. How would you rate the colour (background and foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  1 0.50 0.50 0.50 1 0.50 1  1 1 0.50 0.50 1 1  3 2 2 3 3 3 3 3 2 2  3 3 3 3 3 3 2 2  4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2.	sunken or raised) provided for the clickable and to-be-	No	No	No	No	No	No
4. Is history section include information related to court establishment, former judges, former registrar, constitution of India, and old photos/videos gallery? (Give score from 1 to 5)  Normalised score out of 1  5. Is principle of scaling of content used properly on the website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size) (Give score from 1 to 3)  Normalised score out of 1  6. How would you rate the colour (background and foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  9. How would you rate the balance of the content (horizontal and vertical axis) on the website interface? (Give score from 1 to 3)	3.	via change of colour, underlining content, raised buttons, highlighting text, etc.? (Give score from 1 to 5, 1 point for	3	4	4	3	4	3
court establishment, former judges, former registrar, constitution of India, and old photos/videos gallery? (Give score from 1 to 5)  Normalised score out of 1  5. Is principle of scaling of content used properly on the website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size) (Give score from 1 to 3)  Normalised score out of 1  5. How would you rate the colour (background and foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the balance of the content (horizontal and vertical axis) on the website interface? (Give score from 1 to 3)		Normalised score out of 1	0.50	0.75	0.75	0.50	0.75	0.50
5. Is principle of scaling of content used properly on the website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size) (Give score from 1 to 3)  Normalised score out of 1  6. How would you rate the colour (background and foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the balance of the content (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the balance of the content (Give score from 1 to 3)  Normalised score out of 1  9. How would you rate the balance of the content (horizontal and vertical axis) on the website interface? (Give score from 1 to 3)	4.	court establishment, former judges, former registrar, constitution of India, and old photos/videos gallery? (Give	3	3	4	3	3	3
website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size) (Give score from 1 to 3)  Normalised score out of 1  0.50  0.50  1  0.50  0.50  1  0.50  0.50  0.50  6. How would you rate the colour (background and foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  1  0.50  0.50  0.50  0.50  1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  1  1  0.50  0.50  0.50  1  1  1  0.50  0.50  1  1  1  0.50  0.50  1  1  1  0.50  0.50  1  1  1  0.50  0.50  1  1  0.50  0.50  1  0.50  0.50  1  0.50  0.50  1  0.50  0.50  0.50  1  0.50  0.50  0.50  0.50  0.50  0.50  0.50  0.50  0.50  0.50  0.50  0.50  0.50  0.50		Normalised score out of 1	0.50	0.50	0.75	0.50	0.50	0.50
6. How would you rate the colour (background and foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  1  0.50  0.50  1  0.50  0.50  1  0.50  0.50  1  0.50  0.50  1  0.50  0.50  0.50  1  0.50  0.50  0.50	5.	website? (I.e., different font sizes for different elements based on their importance - big, medium, small font size)	2	2	3	2	2	2
foreground) combination of the website interface? (Give score from 1 to 3)  Normalised score out of 1  1 0.50 0.50 0.50 1  Normalised score out of 1  1 0.50 0.50 0.50 1  Normalised score out of 1  1 1 0.50 0.50 1  1 1 0.50 0.50 1 1 1 0.50 0.50		Normalised score out of 1	0.50	0.50	1	0.50	0.50	0.50
7. How would you rate the white space allocation of the website interface? (Give score from 1 to 3)  Normalised score out of 1  1 1 0.50 0.50 1  8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  1 0.50 0.50 1  0.50 0.50  1 0.50 0.50  9. How would you rate the balance of the content (horizontal and vertical axis) on the website interface? (Give score from 1 to 3)	6.	foreground) combination of the website interface? (Give	3	2	2	2	2	3
website interface? (Give score from 1 to 3)  Normalised score out of 1  1 1 0.50 0.50 1 1 8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1 1 0.50 0.50 1 0.50 0.50 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		Normalised score out of 1	1	0.50	0.50	0.50	0.50	1
8. How would you rate the placement of the different sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1  1 0.50 0.50 1 0.50 0.50 9. How would you rate the balance of the content (horizontal and vertical axis) on the website interface? (Give score from 1 to 3)	7.		3	3	2	2	3	3
sections on the website interface? (Give score from 1 to 3)  Normalised score out of 1 1 0.50 0.50 1 0.50 0.50  9. How would you rate the balance of the content 3 3 3 3 2 3 (horizontal and vertical axis) on the website interface? (Give score from 1 to 3)		Normalised score out of 1	1	1	0.50	0.50	1	1
9. How would you rate the balance of the content 3 3 3 3 2 3 (horizontal and vertical axis) on the website interface? (Give score from 1 to 3)	8.		3	2	2	3	2	2
(horizontal and vertical axis) on the website interface? (Give score from 1 to 3)		Normalised score out of 1	1	0.50	0.50	1	0.50	0.50
Normalised score out of 1 1 1 1 0.50 1	9.	(horizontal and vertical axis) on the website interface?	3	3	3	3	2	3
		Normalised score out of 1	1	1	1	1	0.50	1

No	Question	1	2	3	4	5	6
10.	How would you rate the contrast between two sets of elements as well as between text and background on the website interface? (Give score from 1 to 3)	3	2	2	2	2	3
	Normalised score out of 1	1	0.50	0.50	0.50	0.50	1
	Total score (out of 30) (Yes-1, No-0)	23	21	22	20	20	22
	Total score (out of 10)	6.50	5.25	5.50	5.00	4.75	6.00

## Principle 9: Help users recognize, diagnose and recover from an error

#### **COMPARISON TABLE**

No	Question	1	2	3	4	5	6
1.	In the e-filing section, is it shown that a new user needs to register first before login?	Yes	No	Yes	Yes	No	Yes
2.	In the e-filing section, when invalid credentials are entered, does it show which one out of login username and password was entered wrong?	No	Yes	No	No	No	No
3.	Is it stated that login ID and password are case sensitive?	Yes	No	No	No	No	No
	Is there any provision for recollecting forgotten password?	Yes	Yes	Yes	Yes	Yes	Yes
	Is there any custom message provided when website is not reachable or the server is down (other than general error 404)?	No	No	No	No	No	No
	Does the website alert users that the CAPTCHA entered is wrong?	Yes	Yes	Yes	Yes	Yes	Yes
•••••	Is voice CAPTCHA provided?	No	Yes	Yes	Yes	Yes	Yes
	Is there an option to remember login credentials for future use?	No	No	No	No	Yes	No
	In case data retrieval, does it specifically state the information that is not entered or incorrectly entered?	No	Yes				
		Yes	Yes	Yes	Yes		
	In case data retrieval section, is it stated when no cases are found in selected case type and case year?	Yes	Yes	Yes	Yes	Yes	Yes
	Are specific instructions on multiple computer logins, password sharing guidelines and other data security policies (terms of use) provided at the start?	Yes	Yes	Yes	Yes	Yes	Yes
	Is simple language without technical jargon used for stating any errors or giving instructions?	Yes	Yes	Yes	Yes	Yes	Yes
***************************************	Is 'skip to main content' option provided on the website?	No	No	No	No	No	Yes
	Is CAPTCHA easily readable and simple? (Give score from 1 to 3)	3	3	2	2	3	2
	Normalised score out of 1	1	1	0.50	0.50	1	0.50
	Total score (out of 16) (Yes-1, No-0)	10	11	10	10	11	11
	Total score (out of 14)	8	9	8.5	8.5	9	9.5

#### **Principle 10: Help and documentation**

#### **COMPARISON TABLE**

No	Question	1	2	3	4	5	6
1.	Is a 'search' function provided on every page of the website for better user control navigation?	Yes	No	No	No	No	No
2.	Is the 'search' function presented in a box format?	Yes	No	No	No	No	No
3.	Is the 'search' function presented on the top right corner?	Yes	No	No	No	No	No
4.	Is the 'search' function wide enough to accommodate any query?	No	No	No	No	No	No
5.	Can the 'search' function handle short single word queries and still produce relevant results?	No	No	No	No	No	No
6.	Is there an option provided for 'advanced' search?	No	No	No	No	No	No
7.	Is the site map provided on any of four corners of the website?	Yes	Yes	Yes	Yes	No	Yes
8.	Does the website contain an E-library (explanation of various law jargons, legal information and other related material)?	Yes	Yes	Yes	Yes	Yes	No
9.	Does the website publish court newsletters (monthly/ yearly) or court related news?	Yes	No	No	Yes	Yes	No
10.	Are annual reports of the court provided on the website?	No	No	No	No	No	No
11.	Is the court address provided in the contact information section?	Yes	Yes	Yes	Yes	No	Yes
12.	Is the court phone number/fax number provided in the contact information section?	No	Yes	No	Yes	No	Yes
13.	Is the court email ID for general queries provided in contact information section?	No	Yes	Yes	Yes	No	Yes
14.	Is information related to the court's RTI officers/authority provided on the website?	Yes	No	Yes	Yes	Yes	Yes
15.	Are RTI rules provided on the website?	Yes	Yes	Yes	Yes	Yes	Yes
16.	Are step-by-step instructions on how to use e-case filing provided? A kind of user manual of e-court.	Yes	Yes	No	Yes	No	Yes
17.	Are step-by-step instructions provided on how to retrieve judgments, orders, and cause lists?	No	No	No	No	No	No
18.	Is information related to various administrative officers provided on the website? (entire contact list with their email ID, phone number and office address)	No	No	No	Yes	No	No
19.	Is a general 'FAQs' section provided on the website?	Yes	Yes	No	No	No	Yes
20.	Is there a provision for feedback on the website?	Yes	Yes	No	No	No	Yes
21.	How do you rate the ease of filing and locating information regarding RTI on the website? (Give score from 1 to 5)	3	4	3	1	2	2
	Normalised score out of 1	0.50	0.75	0.50	0	0.25	0.25
22.	Overall, how is the search and navigation of the website? (Give score from 1 to 3)	2	2	2	2	2	2
	Normalised score out of 1	0.50	0.50	0.50	0.50	0.50	0.50
	Total score (out of 28) (Yes-1, No-0)	17	15	11	13	8	13
	Total score (out of 22)	13	10.25	7	10.5	4.75	9.75

#### **Score-wise table**

IDP	Maximum	Delhi	Madhya	Bombay	Karnataka	Calcutta	Madras
IDF	score	Dellill	Pradesh	Dombay	Karriataka	Calcutta	iviaui as
Visibility of     system status	18	13	14	13	13	9	11
2. Match between user and real world	15	11	12	7.75	8.75	10.75	9
3. User control and freedom	9	7.25	7.5	8.25	7	7.5	7.5
4. Consistency and standard	20	15.56	15.75	17.5	17.21	15.16	16.41
5. Error prevention	12	6.25	6.75	7	5.5	5.25	6
6. Recognition rather than recall	11	6	5	5	6	4	5
7. Flexibility and efficiency of use	8	2.75	2.25	2.75	2.75	2	2.5
8. Aesthetic and minimalist design	10	6.50	5.25	5.50	5.00	4.75	6.00
9. Help users recognize, diagnose and recover from an error	14	8	9	8.5	8.5	9	9.5
10. Help and documentation	22	13	10.25	7	10.5	4.75	9.75

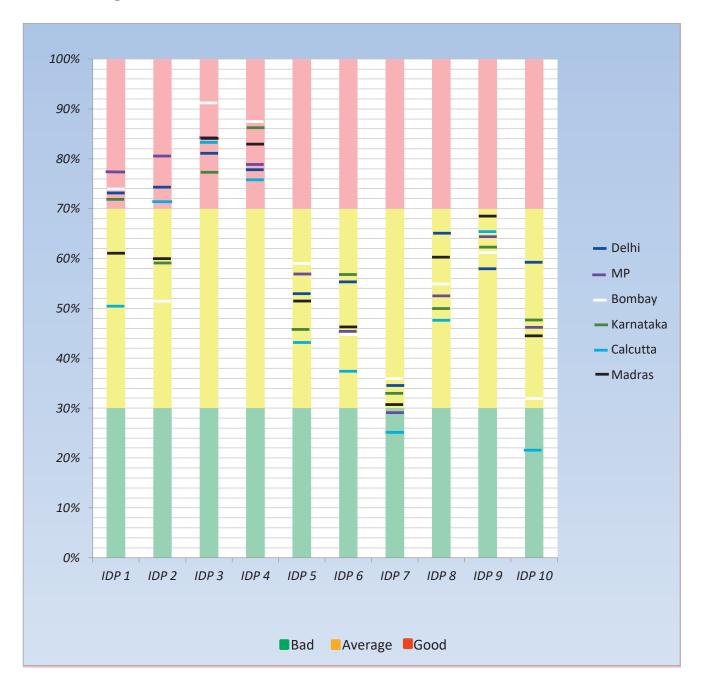
#### **Rank-wise table**

				Rank		
IDP	Delhi	Madhya Pradesh	Bombay	Karnataka	Calcutta	Madras
1. Visibility of system status	2	1	2	2	4	3
2. Match between user and real world	2	1	6	5	3	4
3. User control and freedom	3	2	1	4	2	2
4. Consistency and standard	5	4	1	2	6	3
5. Error prevention	3	2	1	5	6	4
6. Recognition rather than recall	1	2	2	1	3	2
7. Flexibility and efficiency of use	1	3	1	1	4	2
8. Aesthetic and minimalist design	1	4	3	6	5	2
9. Help users recognize, diagnose and recover from an error	4	2	3	3	2	1
10. Help and documentation	1	3	5	2	6	4

## Percentage-wise table

			Percentag	e score (%10	0)		
IDP	Delhi	Madhya Pradesh	Bombay	Karnataka	Calcutta	Madras	Average
1. Visibility of system status	72.2	77.7	72.2	72.2	50.0	61.1	67.6
2. Match between user and real world	73.3	80.0	51.6	58.3	71.7	60.0	65.8
3. User control and freedom	80.5	83.3	91.6	77.7	83.3	83.3	83.3
4. Consistency and standard	77.8	78.7	87.5	86.0	75.8	82.0	81.3
5. Error prevention	52.0	56.2	58.3	45.8	43.7	50.0	51.0
6. Recognition rather than recall	54.5	45.4	45.4	54.5	36.3	45.4	49.9
7. Flexibility and efficiency of use	34.3	28.1	34.3	34.3	25.0	31.2	31.2
8. Aesthetic and minimalist design	65.0	52.5	55.0	50.0	47.5	60.0	55.0
9. Help users recognize, diagnose and recover from an error	57.1	64.2	60.7	60.7	64.2	67.8	62.4
10. Help and documentation	59.1	46.6	31.8	47.7	21.6	44.3	41.9
Average	62.6	61.3	58.9	58.7	51.9	58.5	58.9 58.7

## Percentage wise score of websites for different IDPs Percentage vs. IDP



# A.4. Detailed suggestions for High Courts under study

### **High Court of Delhi**

S.No.	IDP		Suggestions
1.	1	Only 'next' and 'previous' buttons are provided in many sections (e.g., judges) which doesn't give an idea about the number of pages.	The total number of pages, as well as the current page number should be shown to give the users an indication of their position in the overall records.
		Source: heuristic evaluation, user experience test.	
2.	1	The performance and load of the High Court for a given month or year is not provided.	Month or year-wise summaries of the number of pending, disposed, and registered cases should be provided.
		Source: heuristic evaluation.	
3.	1	Information regarding different departments within the court and their functioning is not known.	Administrative setup of the court should be provided stating hierarchy of court officials and different sections.
	Source: heuristic evaluation.		
4.	1	'View' or 'download' or 'print' options are not provided against each uploaded file. It does not give a clear idea about how the file will open on clicking the link.	Sometimes the users might not want to download but just view the file. However, users are intimated about what happens by clicking on it. Three options: 'view', 'download' and 'vrint' about he
		Source: heuristic evaluation.	'download' and 'print' should be provided against each file.
5.	2	For a layperson, it might be difficult to comprehend legal terminology.	Explanation of legal terminology such as roster, cause list, IA status, mediation,
		Source: heuristic evaluation, task-based usability test.	caveat, ILR, the difference between registration date and filing date, etc. should be provided via clickable explainers.
6.	2	For users who do not know English, it is difficult to use the website.	There should be a provision for language change on the website. The website can
		Source: heuristic evaluation, user experience test.	be made available in English, the local state language, and Hindi.
7.	3	There are limited ways to retrieve case information.	There should be numerous ways to retrieve case information (i.e., case
		Source: heuristic evaluation, task-based usability test.	status, judgments, orders, cause list, case history, etc.) including through case number, case type, Act/section, CNR number, party name, advocate name, FIR number, judge name, etc. This can be improved on the website.
8.	4	The CAPTCHA provided is easy and includes only numeric characters. It may not be sufficient to protect the data against malicious cyber-attacks.  Source: heuristic evaluation.	Standard of the CAPTCHA should be such that it provides security against malicious attacks without impeding the speed of operation. It should not be too easy or too difficult to comprehend. CAPTCHA should include uppercase and lowercase characters and numbers.

S.No.	IDP		Suggestions
9.	4	Case data retrieval sections are the most frequently used sections and are not highlighted enough among other sections.  Source: heuristic evaluation, task-based usability test.	Case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.) should be provided on the top bar and also be grouped so that they are highlighted enough.
10.	4	General information sections are difficult to find as they are combined with other sections.	General information sections (court history, judges, annual reports, rules, calendar, etc.) should be grouped together and provided on left or right
		Source: heuristic evaluation, user experience test, task-based usability test.	side bar.
11.	4	In the mobile version, '+' is provided on left side to open the navigation bar on the top. This '+' sign is not visible clearly and difficult to click on.	Website interface on the mobile should be the same as the desktop version.
		Source: heuristic evaluation, user experience test.	
12.	5	It is difficult for users to search for cases if they do not remember the correct format of CNR number, diary number, or case number.	In case data retrieval sections, format of CNR number, diary number, case number, etc. should be given in light font colour or by clickable explainers.
		Source: heuristic evaluation, task-based usability test.	
13.	6	It is difficult for users to search for case data based on the case type, if they do not remember the abbreviation used for the case type.  Source: heuristic evaluation, task-based	In case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.), case types must be provided in abbreviated and full forms. Further, suggestions should be provided in an auto-fill manner while searching.
		usability test.	This will help the user find and recognise the case type quickly.
14.	7	Case status, an important section of the website is not provided at the centre of the homepage like cause list, e-filing, and judgments.	All main sections/functionalities of the website should be provided at the centre of the home page apart from left/right/top bar.
		Source: heuristic evaluation, task-based usability test.	
15.	8	People are not satisfied with the design, colour, architecture, font type, size, etc.	Aesthetics, readability, white space allocation, balance of the content, font size, font type, etc. can be improved.
10	0	Source: user experience test.	
16.	9	In the e-filing section, when users are not able to login, it is difficult to know whether the password or username is entered incorrectly.	In case of invalid credentials, the website should specify which one out of the username or password is incorrect.
		Source: heuristic evaluation.	
17.	10	No instructions are provided on how to use the case data retrieval sections which make it difficult for users to use these sections effectively.	Step-by-step instructions on how to use case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.) should be provided
		Source: heuristic evaluation, task-based usability test.	in the respective sections. Different methods for case-data search can be explained for better usability.

S.No.	IDP		Suggestions
18.	18. 10	No instructions on how to file and track RTI queries are provided.	Instructions on how to file RTI queries (court RTI link, if any) should be
		Source: heuristic evaluation, task-based usability test.	provided under the 'RTI information' section. Further, a mechanism to track the status of the RTI query should be provided. A separate portal pertaining to that can be provided on the website.
19.	10	No 'contact us' section is provided on the website which makes it difficult for users to look for various contact information.	Details of the court such as address, email ID, phone number, fax number, and contact list of various administrative authorities should be provided on the
		Source: heuristic evaluation, user experience test, task-based usability test.	website under 'contact information' section. This section should be available at the bottom of the homepage as users are more likely to look at that place for contact information.
20.	10	Only annual reports of 2006-07, 2007-08, 20010-12 and newsletter of August 2020 are provided on the website. No latest (and archived) reports and newsletters are available on the website.	Court newsletters and annual reports should be available under a 'reports and publication' section of the website. This section must be updated on a timely basis.
		Source: heuristic evaluation, user experience test.	
21.	10	'Search' box is provided on the website but it is not very effective in finding the relevant information on the website.	'Search' function should help users to go to any section on the website. It would be highly effective with an auto-
		Source: heuristic evaluation, task-based usability test.	fill search option. An 'advanced' search option should also be provided for longer queries.

## **High Court of Madhya Pradesh**

S.No.	IDP		Suggestions
1.	1	'View' or 'download' or 'print' options are not provided against each uploaded file. It does not give a clear idea about how the file will open on clicking the link.  Source: heuristic evaluation.	Sometimes the users might not want to download but just view the file. However, users are intimidated about what happens by clicking on it. Three options: 'view', 'download' and 'print' should be provided against each file.
2.	1	No information on the total number of cases for a selected case type and year is provided.  Source: heuristic evaluation, user experience test, task-based usability	There should be a provision to see the number of cases for a selected case type and year or between two selected dates.
3.	1	test. The performance and load of the High Court for a given month or year is not provided. Source: heuristic evaluation.	Month or year-wise summaries of the number of pending, disposed, and registered cases should be provided. Also, these statistics should be highlighted. As of now, they are provided in six-monthly reports named 'best practices' which are available at lower right corner of the home page.

4. 2 For a layperson, it might comprehend legal termin Source: heuristic evaluat usability test.  5. 3 There are limited ways to information. There are not search for case information. There are not search for case information. Source: heuristic evaluat usability test.  6. 4 The CAPTCHA provided includes only numeric chemay not be sufficient to pagainst malicious cyber—Source: heuristic evaluated frequently used sections court websites and are renough among other sections court websites and are renough among other sections and case number.  8. 5 It is difficult for users to sift they don't remember the format of CNR number, cand case number.  Source: heuristic evaluated usability test.  9. 6 It can be time consuming search for case data bastype.  Source: heuristic evaluated usability test.  10. 6 When users click on any in the navigation bar, no highlighted text is provided.	roster, cause list, IA status, mediation, caveat, ILR, the difference between registration date and filing date, etc. should be provided via clickable explainers.  There should be several ways to retrieve case information (i.e., case status, judgments, orders, cause list, case history, etc.) including through case number, case type, Act/section, CNR number, party name, advocate name, FIR number, judge name, etc. This can be improved on the website.  Standard of the CAPTCHA should be such that it provides security against malicious attacks without impeding the speed of operation. It should not be too easy or too difficult to comprehend. CAPTCHA should include uppercase and lowercase characters and numbers.  Circulars/notifications/latest updates should be provided on the right-side
information. There are not search for case information judge name, Act/section Source: heuristic evaluated usability test.  6. 4 The CAPTCHA provided includes only numeric change in may not be sufficient to pagainst malicious cyber—Source: heuristic evaluated frequently used sections court websites and are nough among other sections court websites and are nough among other sections.  8. 5 It is difficult for users to sift they don't remember the format of CNR number, cand case number.  Source: heuristic evaluated usability test.  9. 6 It can be time consuming search for case data bas type.  Source: heuristic evaluated usability test.  10. 6 When users click on any in the navigation bar, no highlighted text is provided.	There should be several ways to retrieve case information (i.e., case status, judgments, orders, cause list, case history, etc.) including through case number, case type, Act/section, CNR number, party name, advocate name, FIR number, judge name, etc. This can be improved on the website.  It is easy and sharacters. It protect the data reattacks. It ation.  CAPTCHA should include uppercase and lowercase characters and numbers.  Circulars/notifications/latest updates should be provided on the right-side
includes only numeric chemay not be sufficient to pagainst malicious cyber-Source: heuristic evaluated.  7. 4 Case data retrieval sections court websites and are menough among other sections court websites and are menough among other sections.  8. 5 It is difficult for users to sift they don't remember the format of CNR number, cand case number.  Source: heuristic evaluate usability test.  9. 6 It can be time consuming search for case data bastype.  Source: heuristic evaluated usability test.  10. 6 When users click on any in the navigation bar, no highlighted text is provided.	sharacters. It such that it provides security against malicious attacks without impeding the speed of operation. It should not be too easy or too difficult to comprehend. CAPTCHA should include uppercase and lowercase characters and numbers.  Circulars/notifications/latest updates should be provided on the right-side
frequently used sections court websites and are nenough among other sec Source: heuristic evaluat usability test.  8. 5 It is difficult for users to sif they don't remember the format of CNR number, cand case number.  Source: heuristic evaluat usability test.  9. 6 It can be time consuming search for case data bas type.  Source: heuristic evaluat usability test.  10. 6 When users click on any in the navigation bar, no highlighted text is provided.	s on Indian high should be provided on the right-side
if they don't remember the format of CNR number, of and case number.  Source: heuristic evaluate usability test.  9. 6 It can be time consuming search for case data base type.  Source: heuristic evaluate usability test.  10. 6 When users click on any in the navigation bar, no highlighted text is provided.	status judaments/orders cause list
9. 6 It can be time consuming search for case data bas type.  Source: heuristic evaluat usability test.  10. 6 When users click on any in the navigation bar, no highlighted text is provided.	the correct of CNR number, diary number, case number, etc. should be given in light font colour or by clickable explainers.
in the navigation bar, no highlighted text is provid	sed on the case status, judgments, orders, cause list, case history, etc.), suggestions should
position of the users. Thi navigation efficiency. Source: heuristic evaluat	y of the links Navigation path showing the user's current position on the website should ded to locate the be provided on the top of the page.
11. 8 People are not satisfied colour, architecture, font Source: user experience	
12. 9 Users are more likely to a while writing username a since it is not indicated t case sensitive.  Source: heuristic evaluates	with the design, Aesthetics, readability, white space allocation, balancing of the content, font size font type etc. can be improved

			Suggestions
13.	9	In the e-filing section, when users are not able to login, it is difficult to know whether the password or the username is entered incorrectly.	In case of invalid credentials, the website should specify which out of the username and password is incorrect.
		Source: heuristic evaluation.	
14.	10	No instructions on how to use case data retrieval sections are provided which makes it difficult for users to use these sections effectively.	Step-by-step instructions on how to use case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.) should be provided in
		Source: heuristic evaluation, task-based usability test.	the respective sections.
15. 10	There is no defined section for court newsletters and annual reports.	Court newsletters and annual reports should be available under a 'reports and	
	Source: heuristic evaluation, user experience test.	publication' section of the website. This section must be updated on a timely basis.	
16.		There is no 'search' function to directly search for different sections.	A search function should be provided on the top right corner on each webpage of
		Source: heuristic evaluation, task-based usability test.	the website. It should be a rectangular box and wide enough to accommodate small and single word queries. It would be highly effective with an auto-fill search option. An 'advanced' search option should also be provided for longer queries.
17. 1	10	No contact details of court administrators is provided on the website.	Details of the court such as address, email ID, phone number, fax number and contact list of various administrative
		Source: heuristic evaluation, user experience test, task-based usability test.	authorities should be provided on the website under 'contact information' section.

## **High Court of Bombay**

S.No.	IDP		Suggestions
1.	1	'View' or 'download' or 'print' options are not provided against each uploaded file. It doesn't give a clear idea about how the file will open on clicking the link.	Sometimes the users might not want to download but just view the file. Three options: 'view', 'download' and 'print' should be provided against each file.
		Source: heuristic evaluation.	
2.	1	No information on total number of cases for selected case type and year is provided. There is a provision to get number of cases between two given dates but it is given as one long list and total entries are not stated.	There should be a provision to see the number of cases for a selected case type and year or between two selected dates.
		Source: heuristic evaluation.	
3.	1	The performance and load of the High Court for a given month or year is not provided.	Month or year-wise summaries of the number of pending, disposed, and registered cases should be provided.
		Source: heuristic evaluation.	

S.No.	IDP		Suggestions
4.	1	Information regarding different court departments and their functioning is not known.	Administrative setup of the court should be provided stating hierarchy of court officials and different sections.
		Source: heuristic evaluation.	
5.	2	For a layman, it might be difficult to comprehend legal terminology.  Source: heuristic evaluation, taskbased usability test.	Explanation of legal terminology such as roster, cause list, IA status, mediation, caveat, ILR, the difference between registration date and filing date, etc. should be provided via
			clickable explainers.
6.	2	Some users might want to increase the font size of the content. No provision for zoom in and zoom out is given.	There should be a provision for zoom in and zoom out on the website.
		Source: heuristic evaluation, user experience test.	
7.	2	For users who do not know English, it is difficult to use the website.	There should be an option to change the language of the website. The website can
		Source: heuristic evaluation, user experience test.	be made available in English, the local state language, and Hindi.
8.	3	There are limited ways to retrieve case data. There is no option to search according to judge name and Act/section.	There should be several ways to retrieve case data (i.e., case status, judgments, orders, cause list, case history, etc.) including through case number, case type, Act/section,
		Source: heuristic evaluation, task- based usability test.	CNR number, party name, advocate name, FIR number, judge name, etc. This can be improved on the website.
9.	4	Case data retrieval sections are the most frequently used sections and are not highlighted enough among other sections.	Case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.) should be provided on the top bar kept separately on the centre of the homepage so
		Source: heuristic evaluation, task- based usability test.	that they are highlighted enough.
10.	5	It is difficult for users to search for cases if they do not remember the correct format of CNR number, diary number and case number.	In case data retrieval sections, format of CNR number, diary number, case number, etc. should be given in light font colour or by clickable explainers.
		Source: heuristic evaluation, task- based usability test.	
11.	6	It would be difficult for users to search for case data based on the case type, if they do not remember the abbreviation used for the case type.	In case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.), case types must be provided in abbreviated and full forms. Further, suggestions should be provided in an autofill manner while searching. This will halp the
		Source: heuristic evaluation, task- based usability test.	fill manner while searching. This will help the user find and recognise the case type quickly.
12.	6	No indicator/highlighted text is provided to locate the position of the users. This reduces their navigation efficiency.	Navigation path showing the user's current position on the website should be provided on the top of the page.
		Source: heuristic evaluation.	

S.No.	IDP		Suggestions
13.	8	People are not satisfied with the design, colour, architecture, font type, size, etc.	Aesthetics, readability, white space allocation, balancing of the content, font size, font type, etc. can be improved.
		Source: user experience test.	
14.	9	Users are more likely to make errors while writing username and password since it is not indicated that they are case sensitive.	It should be stated that the password and username are case sensitive.
		Source: heuristic evaluation.	
15.	9	In the e-filing section, when users are not able to login, it is difficult to know whether the password or the username is entered incorrectly.	In case of invalid credentials, the website should specify which out of the username and password is incorrect.
		Source: heuristic evaluation.	
16.	10	No instructions are provided on how to use the e-filing system. It decreases user efficiency.	Step-by-step instructions, starting from registration and using the e-filing facility of the court should be provided on the website.
		Source: heuristic evaluation.	
17.	10	No instructions on how to use case data retrieval sections are provided which makes it difficult for users to use these sections effectively.	Step-by-step instructions on how to use case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.) should be provided in the respective
		Source: heuristic evaluation, task- based usability test.	sections.
18.	10	No provision for users to give feedback related to the website and court administration.	'Feedback' section to give feedback related to the website and court administration should be provided.
		Source: heuristic evaluation.	
19.	10	No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.	General 'FAQs' section containing important questions and answers should be provided on the website.
		Source: heuristic evaluation, task- based usability test.	
20.	10	No instructions on how to file and track RTI queries are provided.	Instructions on how to file RTI queries (court RTI link, if any) and other RTI related
		Source: heuristic evaluation, task- based usability test.	information, should be provided under the 'RTI information' section. Further, a mechanism to track the status of the RTI query should be provided. A separate portal pertaining to that can be provided on the website.
21.	10	Phone number is not provided in the contact information section. Also, contact information of various court administrators is not available on the website.	Details of the court such as address, email ID, phone number, fax number and contact list of various administrative authorities should be provided on the website under 'contact information' section. This section should be available at the bottom of the homepage as
		Source: heuristic evaluation, user experience test, task-based usability test.	users are more likely to look at that place for contact information.

S.No.	IDP		Suggestions
22.	10	Annual reports and newsletters of the High Court are not available on the website. This information gives an idea about various activities and initiatives of the High Court throughout the year.	Court newsletters and annual reports should be available under a 'reports and publication' section of the website. This section must be updated on timely basis.
		Source: heuristic evaluation, user experience test.	
23.	10	There is no 'search' function to directly search for different sections. It reduces navigation efficiency of users.	A search function should be provided on the top right corner on each webpage of the website. It should be a rectangular box and wide enough to accommodate small
	based usability test.	and single word queries. It would be highly effective with an auto-fill search option. An 'advanced' search option should also be provided for longer queries.	

## **High Court of Karnataka**

S.No.	IDP		Suggestions
1.	1	The performance and load of the High Court for a given month or year is not provided.	Month or year-wise summaries of the number of pending, disposed, and registered cases should be provided.
		Source: heuristic evaluation.	
2.	1	'View' or 'download' or 'print' options are not provided against each uploaded file. It doesn't give a clear idea about how the file will open on clicking the link.	Sometimes the users might not want to download but just view the file. Three options: 'view', 'download' and 'print' should be provided against each file.
		Source: heuristic evaluation.	
3.	1	Information regarding different court departments and their functioning is not known.	Administrative setup of the court should be provided stating hierarchy of court officials and different sections.
		Source: heuristic evaluation.	
4.	1	No information on total number of cases for selected case type and year is provided. There is a provision to get number of cases between two given dates but it is in combination with the party name.	There should be a provision to see the number of cases for a selected case type and year or between two selected dates.
		Source: heuristic evaluation.	
5.	2	For a layman, it might be difficult to comprehend legal terminology.  Source: heuristic evaluation, task-based usability test.	Explanation of legal terminology such as roster, cause list, IA status, mediation, caveat, ILR, the difference between registration date and filing date, etc. should be provided via clickable explainers.

S.No.	IDP		Suggestions
6.	2	For users who do not know English, it is difficult to use the website.	There should be an option to change the language of the website. The website can be made available in English, the local state language, and Hindi.
		Source: heuristic evaluation, user experience test.	
7.	3	There are limited ways to retrieve case information. There is no option to search according to judge name or Act/section.	There should be several ways to retrieve case information (i.e., case status, judgments, orders, cause list, case history, etc.) including through case number, case type, Act/section, CNR number, party name, advocate name, FIR number, judge name, etc. This can be improved on the website.
		Source: heuristic evaluation, task-based usability test.	This can be improved on the website.
8.	4	The CAPTCHA provided is easy and includes only numeric characters. It may not be sufficient to protect the data against malicious cyber-attacks.	In case-data retrieval section, CAPTCHA should be provided and standard of the CAPTCHA should be such that it provides security against malicious attacks without impeding the speed of operation. It should not be too easy or too difficult to comprehend. CAPTCHA should include uppercase and lowercase characters and numbers.
		Source: heuristic evaluation, user experience test.	
9.	6	It can be time consuming for users to search for case data based on the case type.	In case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.), suggestions should be provided in an auto-fill
		Source: heuristic evaluation, task-based usability test.	manner while searching. This would help the user in recognising case information and retrieving the required information quickly.
10.	8	People are not satisfied with the design, colour, architecture, font type, size, etc.	Aesthetics, readability, white space allocation, balancing of the content, font size, font type, etc. can be improved.
		Source: user experience test.	
11.	9	Users are more likely to make errors while writing username and password since it is not indicated that they are case sensitive.	It should be stated that the password and username are case sensitive.
		Source: heuristic evaluation.	
12.	9	In the e-filing section, when users are not able to login, it is difficult to know whether the password or username is entered incorrectly.	In case of invalid credentials, the website should specify which out of username and password is incorrect.
		Source: heuristic evaluation.	
13.	10	No instructions are provided on how to use case data retrieval sections which make it difficult for users to use these sections effectively.	Step-by-step instructions on how to use case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.) should be provided in the respective sections. Different methods for case-data search can be explained for better usability
		Source: heuristic evaluation, task-based usability test.	

S.No.	IDP		Suggestions
14.	10	No provision for users to give feedback related to the website and court administration.	'Feedback' section to give feedback related to the website and court administration should be provided.
		Source: heuristic evaluation.	
15.	10	No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.	General 'FAQs' section containing important questions and answers should be provided on the website.
		Source: heuristic evaluation, task-based usability test.	
16.	10	No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.	RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), instructions on how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of the RTI query should be provided. A separate portal pertaining to that can be provided
			on the website.
17.	10	Annual reports and newsletters of the High Court are not available on the website. This information gives an idea about various activities and initiatives of the High Court throughout the year.	Court newsletters and annual reports should be available under a 'reports and publication' section of the website. This section must be updated on a timely basis.
		Source: heuristic evaluation, user experience test.	
18	10	There is no 'search' function to directly search for different sections. It reduces the navigation efficiency of users.  Source: heuristic evaluation,	A 'search' function should be provided on the top right corner on each webpage of the website. It should be a rectangular box and wide enough to accommodate small and single word queries. It would be highly effective with an auto-fill search option. An 'advanced' search option should also be provided for longer queries.
		task-based usability test.	provided for longer queries.

## **High Court of Calcutta**

S.No.	IDP		Suggestions
1.	1	The performance and load of the High Court for a given month or year is not provided.	Month or year-wise summaries of the number of pending, disposed, and registered cases should be provided.
		Source: heuristic evaluation.	
2.	1	No indicator or highlighted text is provided to locate the position of the users. This reduces their navigation efficiency.	There should be an indicator to show the current location of the user on the website.
		Source: heuristic evaluation, user experience test.	

S.No.	IDP		Suggestions
3.	1	No site map is provided on the website. It improves the usability of the website.	A site map should be given on the website for better usability.
		Source: heuristic evaluation, task-based usability test.	
4.	1	'View' or 'download' or 'print' options are not provided against each uploaded file. It does not give a clear idea about how the file will open on clicking the link.	Sometimes the users might not want to download but just view the file. However, users are intimated about what happens by clicking on it. Three options: 'view,' 'download' and 'print' should be provided against each file.
		Source: heuristic evaluation.	
5.	1	Information regarding different court departments and their functioning is not known.	Administrative setup of the court should be provided stating hierarchy of court officials and different sections.
		Source: heuristic evaluation.	
6.	2	For a layman, it might be difficult to comprehend legal terminology.	Explanation of legal terminology such as roster, cause list, IA status, mediation, caveat, ILR, the difference between registration date and filing date,
		Source: heuristic evaluation, task-based usability test.	etc. should be provided via clickable explainers.
7.	2	'Our contacts' sub-section is provided on the top menu bar under 'About' section. The section should be given better placement where users can easily see it.	A 'Contact us' section should be provided on the bottom of the website as users are more likely to look at the bottom section of the website for it.
		Source: heuristic evaluation, user experience test, task-based usability test.	
8.	4	In case data retrieval, there is no provision to get the number of registered cases for a given judge or between two selected dates.	There should be a provision to see the number of cases between two selected dates and also search for cases according to the judge.
		Source: heuristic evaluation, task-based usability test.	
9.	5	It is difficult for users to search for cases if they do nt remember the correct format of CNR number, diary number and case number.	In case data retrieval sections, format of CNR number, diary number, case number, etc. should be given in light font colour or by clickable explainers.
		Source: heuristic evaluation, task-based usability test.	
10.	6	It can be time consuming for users to search for case data based on the case type.	In case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.), suggestions should be provided in an auto-fill
		Source: heuristic evaluation, task-based usability test.	manner while searching. This will help the user find and recognise the case type quickly.

make errors while writing the username and password since it is not indicated that they are case sensitive.  Source: heuristic evaluation.  13. 9 In the e-filing section, when users are not able to login, it is difficult to know which whether the password or the username is entered incorrectly.  Source: heuristic evaluation.  14. 10 No instructions are provided on how to use the e-filing system.  Source: heuristic evaluation.  15. 10 No instructions are provided on how to use the e-filing system.  Source: heuristic evaluation.  16. 10 No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation.  17. 10 No FAQs' section is provided on the website. This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.	S.No.	IDP		Suggestions
12. 9 Users are more likely to make errors while writing the username and password since it is not indicated that they are case sensitive.  Source: heuristic evaluation.  13. 9 In the e-filing section, when users are not able to login, it is difficult to know which whether the password or the username is entered incorrectly.  Source: heuristic evaluation.  14. 10 No instructions are provided on how to use the e-filing system.  Source: heuristic evaluation.  15. 10 No instructions are provided on how to use case data retrieval sections which makes it difficult for users to use these sections effectively.  Source: heuristic evaluation, task-based usability test.  16. 10 No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation.  No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.	11.	8	with the design, colour, architecture, font type, size, etc.	balancing of the content, font size, font type, etc.
13. 9 In the e-filing section, when users are not able to login, it is difficult to know which whether the password or the username is entered incorrectly.  Source: heuristic evaluation.  14. 10 No instructions are provided on how to use the e-filing system.  Source: heuristic evaluation.  15. 10 No instructions are provided on how to use case data retrieval sections which makes it difficult for users to use these sections effectively.  Source: heuristic evaluation, task-based usability test.  16. 10 No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  Source: heuristic evaluation, task-based usability test.	12.	9	Users are more likely to make errors while writing the username and password since it is not indicated that	It should be stated that the password and username are case sensitive.
users are not able to login, it is difficult to know which whether the password or the username is entered incorrectly.  Source: heuristic evaluation.  14. 10 No instructions are provided on how to use the e-filling system.  Source: heuristic evaluation.  15. 10 No instructions are provided on how to use case data retrieval sections which makes it difficult for users to use these sections effectively.  Source: heuristic evaluation, task-based usability test.  16. 10 No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  Source: heuristic evaluation, task-based usability test.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section. Further, a mechanism to track the status of section.			Source: heuristic evaluation.	
14. 10 No instructions are provided on how to use the e-filing system.  Source: heuristic evaluation.  15. 10 No instructions are provided on how to use case data retrieval sections which makes it difficult for users to use these sections effectively.  Source: heuristic evaluation, task-based usability test.  16. 10 No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation.  17. 10 No 'FAQs' section is provided on the website.  This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions are provided on the website.  This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions are provided on the website and how to use e-filing facility of the court should be provided on the website.  Step-by-step instructions on how to use case data retrieval sections (i.e, case status, judgments, orders, cause list, case history, etc.) should be provided in the respective sections.  Feedback' section to give feedback related to the website and court administration should be provided.  General 'FAQs' section containing important questions and answers should be provided on the website.  This section would provide website.  Source: heuristic evaluation, task-based usability test.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of	13.	9	users are not able to login, it is difficult to know which whether the password or the username is entered	specify which one out of the username and
and how to use e-filing system.  Source: heuristic evaluation.  15. 10 No instructions are provided on how to use case data retrieval sections which makes it difficult for users to use these sections effectively.  Source: heuristic evaluation, task-based usability test.  16. 10 No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation.  Tin section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions are provided on the website.  This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  Source: heuristic evaluation, task-based usability test.			Source: heuristic evaluation.	
15.   10   No instructions are provided on how to use case data retrieval sections which makes it difficult for users to use these sections effectively.  Source: heuristic evaluation, task-based usability test.  16.   10   No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation.  Source: heuristic evaluation, task-based usability test.  17.   10   No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18.   10   No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  18.   10   No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of	14.	10	on how to use the e-filing system.	Step-by-step instructions, starting from registration and how to use e-filing facility of the court should be provided on the website.
on how to use case data retrieval sections which makes it difficult for users to use these sections effectively.  Source: heuristic evaluation, task-based usability test.  16. 10 No provision for users to give feedback related to the website and court administration.  Source: heuristic evaluation.  17. 10 No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  Source: heuristic evaluation, task-based usability test.  No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of				
task-based usability test.  16.	15.	10	on how to use case data retrieval sections which makes it difficult for users to use these sections	retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.) should be
to give feedback related to the website and court administration should be provided.  17. 10 No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  Source: heuristic evaluation, task-based usability test.  This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  The website and court administration should be provided.  General 'FAQs' section containing important questions and answers should be provided on the website.  Website.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of				
17. 10 No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  Source: heuristic evaluation, task-based usability test.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of	16.	10	to give feedback related to the website and court	the website and court administration should be
provided on the website. This section would provide the users with answers to general questions.  Source: heuristic evaluation, task-based usability test.  18. 10 No instructions on how to file and track RTI queries are provided. Source: heuristic evaluation, task-based usability test.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of			Source: heuristic evaluation.	
task-based usability test.  10 No instructions on how to file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  RTI rules, details of the current RTI officer (such as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of	17.	10	provided on the website. This section would provide the users with answers to	questions and answers should be provided on the
file and track RTI queries are provided.  Source: heuristic evaluation, task-based usability test.  as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information, all should be provided under the 'RTI information' section. Further, a mechanism to track the status of				
section. Further, a mechanism to track the status of	18.	10	file and track RTI queries are provided.  Source: heuristic evaluation,	as name, position, email ID, phone number, office address, fax number), how to file RTI queries (court RTI link, if any) and other RTI related information,
the RTI query should be provided.			task-based usability test.	section. Further, a mechanism to track the status of
	19.	10	provided. Archives of the same and annual reports are	Archives of the court newsletters and annual reports of past months/years should be available under a
Source: heuristic evaluation, user experience test.				

S.No.	IDP		Suggestions
20.	10	There is no 'search' function to directly search for different sections. It reduces navigation efficiency of users.  Source: heuristic evaluation, task-based usability test.	A 'search' function should be provided on the top right corner on each webpage of the website. It should be a rectangular box and wide enough to accommodate small and single word queries. It would be highly effective with an auto-fill search option. An 'advanced' search option should also be provided for longer queries.

## **High Court of Madras**

S.No.	IDP		Suggestions
1.	1	The performance and load of the High Court for a given month or year is not provided.	Month or year-wise summaries of the number of pending, disposed, and registered cases should be provided.
***************************************		Source: heuristic evaluation.	
2.	1	No information on total number of cases for a selected case type and year is provided.	There should be a provision to see the number of cases for a selected case type and year or between two selected dates.
		Source: heuristic evaluation, user experience test.	
3.	1	No indicator or highlighted text is provided to give the current position of the users. This reduces their navigation efficiency.	There should be an indicator to show the current location of the user on the website.
		Source: heuristic evaluation, user experience test.	
4.	1	Court calendar is not available on the website.	There should be a calendar with non-working days of the court highlighted on the website.
		Source: heuristic evaluation.	
5.	1	'View' or 'download' or 'print' options are not provided against each uploaded file. It does not give a clear idea about how the file will open on clicking the link.	Sometimes the users might not want to download but just view the file. Three options: 'view', 'download' and 'print' should be provided against each file.
		Source: heuristic evaluation.	
6.	2	For a layman, it might be difficult to comprehend legal terminology.	Explanation of legal terminology such as roster, cause list, IA status, mediation, caveat, ILR, the difference between registration date and filing date,
		Source: heuristic evaluation, user experience test.	etc. should be provided via clickable explainers.
7.	2	For users who do not know English, it is difficult to use the website.	There should be an option to change the language of the website. The website can be made available in English, the local state language, and Hindi.
		Source: heuristic evaluation, user experience test.	

S.No.	IDP		Suggestions
8.	4	In the case data retrieval sections, there is no option to search for registered cases according to the judge or between two selected dates.	There should be a provision to see the number of cases between two selected dates and search for cases according to the judge or bench.
		Source: heuristic evaluation.	
9.	4	The CAPTCHA provided is easy and includes only numeric characters. It may not be sufficient to protect the data against malicious cyber-attacks.	Standard of the CAPTCHA should be such that it provides security against malicious attacks without impeding the speed of operation. It should not be too easy or too difficult to comprehend. CAPTCHA should include uppercase and lowercase characters and numbers.
		Source: heuristic evaluation, user experience test.	
10.	6	It can be time consuming for users to search for case data based on the case type.	In case data retrieval sections (i.e., case status, judgments, orders, cause list, case history, etc.), suggestions should be provided in an auto-fill
		Source: heuristic evaluation, task-based usability test.	manner while searching. This would help the user find and recognise the case type quickly.
11.	8	People are not satisfied with the design, colour, architecture, font type, size, etc.	Aesthetics, readability, white space allocation, balancing of the content, font size, font type, etc. can be improved.
		Source: user experience test.	
12.	9	Users are more likely to make errors while writing the username and password since it is not indicated that they are case sensitive.	It should be stated that the password and username are case sensitive.
	···	Source: heuristic evaluation.	
13.	9	In the e-filing section, when users are not able to login, it is difficult to know whether the password or the username is entered incorrectly.	In case of invalid credentials, the website should specify which out of the username and password is incorrect.
		Source: heuristic evaluation.	
14.	10	No provision for users to give feedback related to the website and court administration.	'Feedback' section to give feedback related to the website and court administration should be provided.
		Source: heuristic evaluation.	
15.	10	No 'FAQs' section is provided on the website. This section would provide the users with answers to general questions.	General 'FAQs' section containing important questions and answers should be provided on the website.
		Source: heuristic evaluation, task-based usability test.	

S.No.	IDP		Suggestions
16.	10	No instructions on how to file and track RTI queries are provided.	Instructions on how to file and track RTI queries (court RTI link, if any) should be provided under the 'RTI information' section. Separate portal pertaining
		Source: heuristic evaluation, task-based usability test.	to that can be provided on the website.
17.	10	E-library, containing various acts, e-journals, e-books, and other related material is not available.	An e-library containing various acts, e-journals, e-books, and other related material should be provided on the website.
		Source: heuristic evaluation.	
18.	10	There is no 'search' function to directly search for different sections. It reduces navigation efficiency of users.	A search function should be provided on the top right corner on each webpage of the website. It should be a rectangular box and wide enough to accommodate small and single word queries. It would be highly effective with an auto-fill search
		Source: heuristic evaluation, task-based usability test.	option. An 'advanced' search option should also be provided for longer queries.