

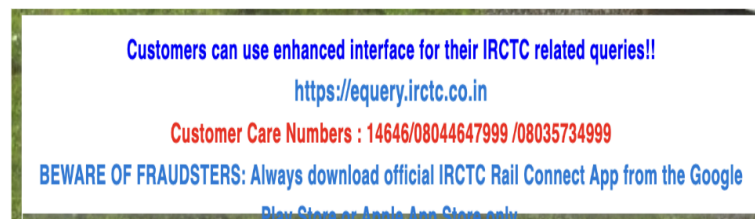
HEURISTIC EVALUATION

Heuristic Factor

1.Visibility of System Status

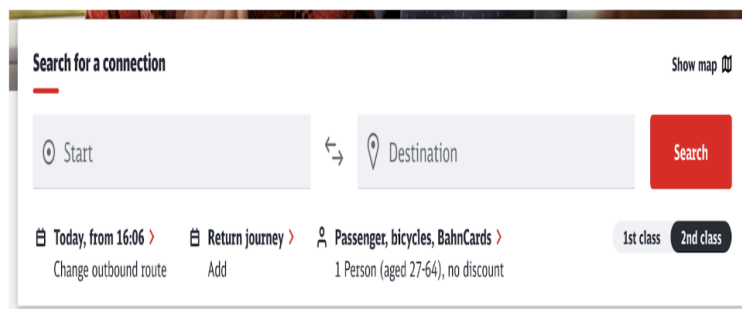
❖ IRCTC

- IRCTC also has loading indicators but sometimes, users receive ambiguous waiting times or abrupt delays.
- Certain of the status postings (e.g., ticket status) may be behind.
 - Mobile alerts are restricted, so live updates are not as free.



❖ Deutsche Bahn (DB)

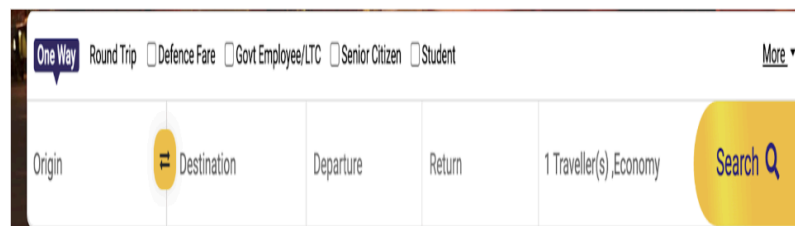
- DB offers neat progress bars and status messages, particularly for steps in booking.
- Real-time updates of delays and schedule adjustments happen more frequently across both web-based and mobile services.
- Push notifications are available, although they need to be turned on by the user.



2. Match Between System and Real World

❖ IRCTC

- Uses a great deal of railway terminology (e.g., station codes) that may be off-putting to occasional or inexperienced users.
- The flow is somewhat consistent with the norms of Indian travel (e.g., numbering trains), but lacks the explanations in everyday language.
 - Date and time formats are uniform.



The screenshot shows the IRCTC booking interface. At the top, there are tabs for 'One Way' and 'Round Trip', and checkboxes for 'Defence Fare', 'Govt Employee/LTC', 'Senior Citizen', and 'Student'. Below these are input fields for 'Origin', 'Destination' (with a train icon), 'Departure', 'Return', and '1 Traveller(s), Economy'. A yellow 'Search' button with a magnifying glass icon is on the right.

❖ Deutsche Bahn (DB)

- Typically employs simple station names and route numbers with minimal jargon.
- Goes well with general European travel purposes (i.e., city-to-city request).
- Formats for date and time can be set to user preference in most instances.



Seat reservation

- Reserve your seat for a relaxed journey
- Available for long-distance and regional trains

> [Further information](#)



First class upgrade

- Book before and during the journey, up to 10 minutes after departure
- Seat reservation included
- You can also book for several people at the same time

> [Further information](#)

3. User Control and Freedom

❖ IRCTC

- Customers can cancel or modify bookings, but the process has multiple confirmation steps and minimal assistance.
- Navigation to previous steps can reset some selections, which can be frustrating.
- Logout and profile management appear in less visible menus.

Online change of Boarding Point

❖ Deutsche Bahn (DB)

- DB facilitates simple editing of travel information prior to the final payment.
- There are speedy links to change or cancel, but some of the more sophisticated features (e.g., seat bookings) take extra steps.
- Repetitive "Cancel" and "Back" actions allow users to remain in command.

Exchanging or cancelling tickets or reservations

We have detailed information for you on how to change or cancel journeys. Simply select your ticket or reservation type in the list displayed below.



It is not possible to exchange booked tickets. However, you can cancel your purchased tickets and book a new trip.

Instant ticket cancellation

If you buy a ticket via int.bahn.de or the DB Navigator app, you can cancel it free of charge within a period of 3 hours (180 minutes) after purchase, in addition to the specific offer's terms and conditions. You can only cancel up to one day before the first day of validity. Payment will be refunded in full.

4. Consistency and Standards

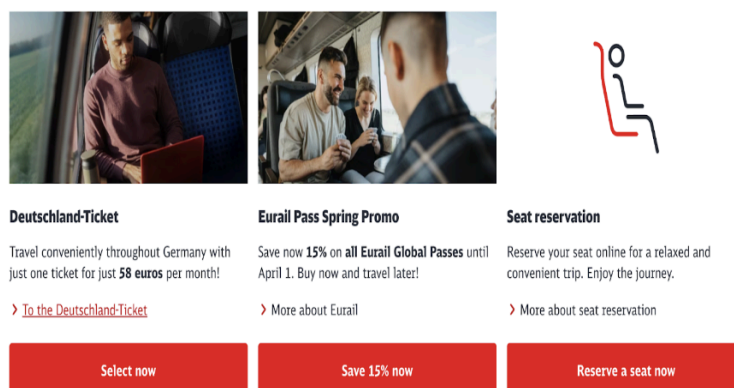
❖ IRCTC

- Inconsistent naming (e.g., "PNR Status" vs. "Ticket Status") might be confusing to new users.
- Icons and design are slightly different on the website and mobile app.
 - Conformity to common web conventions (such as default menu positions) is partial, resulting in some confusion.



❖ Deutsche Bahn (DB)

- DB's branding and navigation are very consistent across platforms.
- Terminology (for instance, "My Bookings," "Trip Planner") is consistent.
- Uses common icons and layouts, which increases user familiarity.



5. Error Prevention

❖ IRCTC

- The system does have some controls (e.g., verification of passenger details), but accidental submission with incomplete forms is feasible.
 - Insufficient prompts for affirmation of significant actions (e.g., cancellation).
 - Form validation error messages tend to appear at the end.

Sorry!!! Please Try again!!

This error has occurred for one of the following reasons:

1. You have tried opening the URL in new tab/window.
2. You have used Back/Forward/Refresh button of your Browser.
3. You have double clicked on any options/buttons.
4. You have kept the browser window idle for a long time.

[Click here to login.](#)

❖ Deutsche Bahn (DB)

- DB uses clear form validation and requests users to correct errors in advance.
- System alerts appear prior to any definitive steps (e.g., last purchase).
 - Provide clear error messages and highlight fields that must be corrected.

The screenshot shows the 'Search for a connection' interface on the Deutsche Bahn website. It features a search bar with 'Start' and 'Destination' fields, a 'Search' button, and a list of suggested stations. Below the search bar, there are options for 'Passenger, bicycles, BahnCards', '1st class' and '2nd class' selection, and a 'Book seat only' toggle. A 'Bicycle transport possible' toggle is also visible. At the bottom, there is a link for 'Information for holders of the Deutschland-Ticket'.

Search for a connection

Start: d

Destination:

Search

Passenger, bicycles, BahnCards >

1 Person (aged 27-64), no discount

1st class 2nd class

Transfer time > Book seat only ?

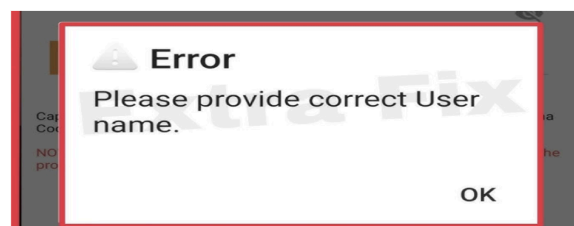
Bicycle transport possible

Information for holders of the Deutschland-Ticket

6. Recognition Rather Than Recall

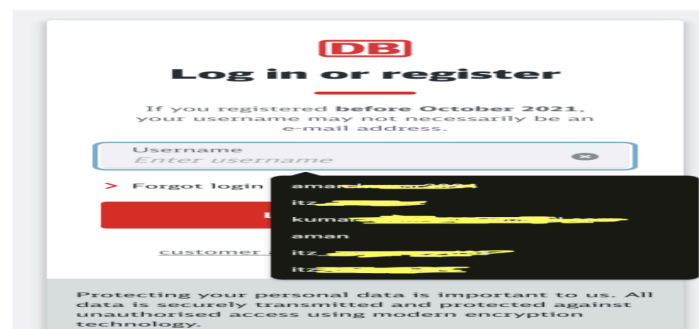
❖ IRCTC

- Search needs station codes or part of station name; no good suggestions or autofill in certain areas.
- Historical questions are sometimes recalled but not necessarily readily accessible.
- Booking history format is limited, and the user has to recall information.



❖ Deutsche Bahn (DB)

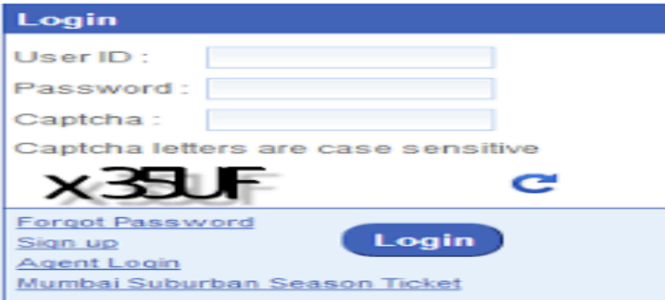
- DB auto-suggest is strong, with station/city name completion.
- Earlier searches and bookmarks can be easily accessed to re-book instantly.
- Booking history includes valuable information (e.g., travel date, train number) to reduce reliance on memory.



7. Flexibility and Efficiency of Use

❖ IRCTC

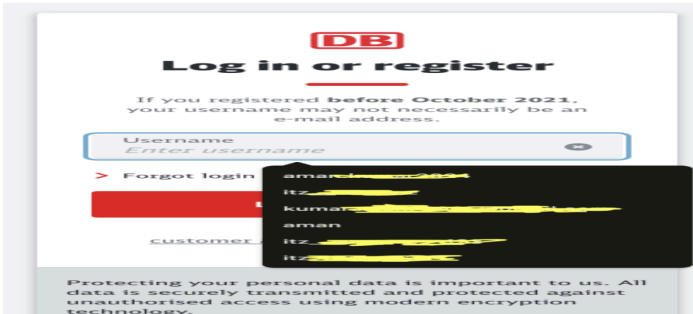
- Fewer shortcuts; power users have to go through the same steps as beginners.
- Mobile applications may be allowed to hold passenger information but not seat choice or other specialized preferences.
- Batch or group bookings may be cumbersome with minimal automation.



The screenshot shows the IRCTC login interface. It has a blue header with the word "Login". Below it are input fields for "User ID :", "Password :", and "Captcha :". A note states "Captcha letters are case sensitive" above a captcha image showing "x35UF" and a small "C" logo. At the bottom, there are links for "Forgot Password", "Sign up", "Agent Login", and "Mumbai Suburban Season Ticket", along with a blue "Login" button.

❖ Deutsche Bahn (DB)

- DB provides customer profiles (e.g., saving passenger information, rail passes) to speed up booking.
- Some advanced functionalities such as flexible date searches and seat preferences are included.
- Power users can create personalized route alerts and subscription services.



The screenshot shows the Deutsche Bahn (DB) login/register page. It features the DB logo at the top, followed by the heading "Log in or register". A note says "If you registered before October 2021, your username may not necessarily be an e-mail address." Below this is a "Username" input field with the placeholder "Enter username". To the left of the input field is a red button labeled "Forgot login". Below the input field is a "customer" label. At the bottom, there is a security notice: "Protecting your personal data is important to us. All data is securely transmitted and protected against unauthorised access using modern encryption technology."

8. Aesthetic and Minimalist Design

❖ IRCTC

- The user interface is content-dense with banners and advertisements, resulting in visual clutter.
- Some pages are cluttered with multiple links and blocks of text.
- The color palette functions but is never actually pretty to gaze upon.

**Have you not found the right one?
Find a service suitable for you here.**



❖ Deutsche Bahn (DB)

- DB's minimalist design places more emphasis on fundamental travel information.
- Makes use of whitespace well to enhance readability of text.
- Repeating the color scheme and font assists in giving a neat, professional look.



Tickets & offers

- Saver and flexible fares
- Regional offers
- Travel pass offers
- Night trains

➤ [To the tickets and offers](#)



Booking information

- Exchanges and cancellation
- Passenger rights
- DB Navigator app
- Payment options

➤ [To the booking information](#)



Our train fleet

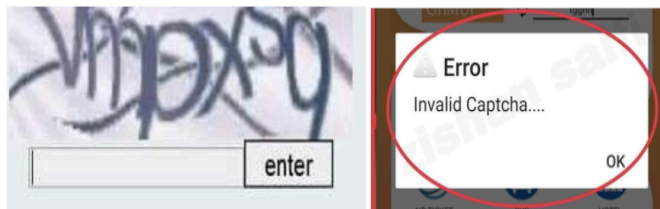
- Long-distance trains such as ICE, IC and EC
- Regional and S-Bahn trains
- Wifi on trains
- Travelling in first class

➤ [Trains](#)

9. Help Users Recognize, Diagnose, & Recover from Errors

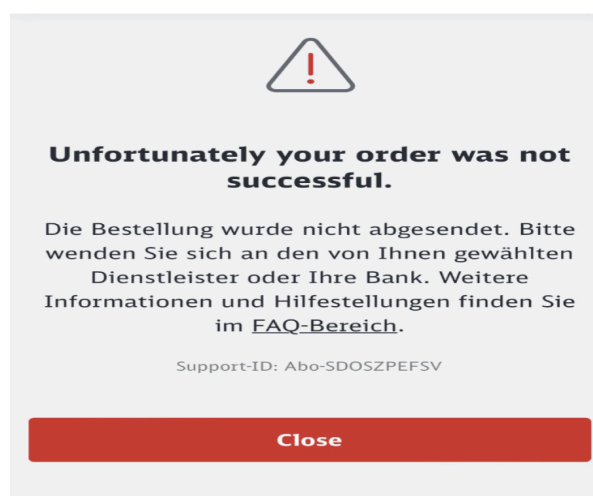
❖ IRCTC

- Error messages tend to be vague and do not necessarily point to definitive next actions.
- Very little contextual advice or prompting on how to approach a problem.
- Correcting payment or reservation errors may include contacting support.



❖ Deutsche Bahn (DB)

- DB displays certain error messages (for example, invalid card number, passenger data missing).
 - Inline suggestions instruct users to fix errors efficiently.
- Offers direct links or reminders to retry payment or modify bookings.



10. Help Documentation

❖ IRCTC

- There is a FAQs page, although it is not necessarily obvious and is not context-sensitive.
- Significant help documents are typically located on independent pages or independent PDFs.
- There are customer lines, but one has to wait a long while.



❖ Deutsche Bahn (DB)

- DB contains in-built tips for assistance throughout the booking process.
- Online support center is properly structured and has a strong search function.
- Callback and live chat are sometimes provided, speeding up support.

Help & contact
Do you have a question or need support?

What would you like to know?
Enter your search term(s) here.

Search for business travellers >

Comparing user experience and usability of IRCTC (Indian Railway Catering and Tourism Corporation) and DB (Deutsche Bahn), some of the key observations are:

❖ IRCTC

➤ Strengths:

- **Local User Familiarity:** The site meets the expectations of the Indian traveler and is therefore intuitive to use by regular users.
- **Basic Booking Facility:** It provides basic ticket booking for common routes.
- **Standard Date/Time Formats:** Uses standard formats that minimize possible confusion.

➤ Weaknesses:

- **Inconsistent Terminology:** Inconsistencies in labels cause confusion to users.
- **System Delays:** Users may experience unexpected delays in queuing while performing booking procedures.
- **Cluttered Interface:** Consumers are frustrated with excess information and advertising.
- **Limited Error Prevention:** The system does not have preventive actions to stop user errors while booking.

❖ Deutsche Bahn (DB):

➤ Strengths:

- **Consistent Interface Design:** Uniformity across platforms enhances user familiarity.

- **Clear Labeling:** Terminology is straightforward, aiding user comprehension.
- **Strong Auto-Suggestions:** The system effectively predicts user inputs, streamlining the booking process.
- **Helpful Inline Error Messages:** Immediate feedback assists users in correcting mistakes promptly.

➤ **Weaknesses:**

- **Complexity for Non-Local Users:** Features like seat selection or special discounts may be challenging for those unfamiliar with the German or European rail systems.

★ **Recommendations for Improvement:**

○ **For IRCTC:**

- **Improve Error Prevention:** Make more explicit validation messages available to inform users.
- **Simplify Interface:** Eliminate unnecessary items such as advertisements to simplify the user interface.
- **Improve Auto-Suggestions:** Develop features that predict user inputs to minimize reliance on station codes.
- **Show Context-Sensitive Help:** Show help that is relevant to the context of the user's task.

○ **For DB:**

- **Assist International Users:** Include multilingual tooltips and define terms to assist users who are not acquainted with the system.
- **Improve Mobile Notifications:** Keep refining aggregated notifications for delays or schedule adjustments.
- **Ensure Consistency:** Regularly review the user interface to keep the site consistent with the mobile applications.

Conclusion:

While both platforms have their strengths and areas for improvement, **Deutsche Bahn (DB)** offers a more consistent and user-friendly experience overall. Its clear labeling, effective auto-suggestions, and helpful error messages contribute to a smoother booking process. However, for users familiar with the Indian railway system, **IRCTC** remains a functional choice, especially for straightforward bookings.

Note: *These observations are based on user experience analyses and may not encompass all aspects of each platform's functionality.*