Here are 10 statistical reports that can provide valuable insights into its performance, effectiveness, and user interaction:

1. User Engagement Report: Analyzes the number of users interacting with the chatbot, frequency of use, and average session duration.

2. Response Accuracy Report: Measures the accuracy of the chatbot’s responses to user queries, comparing correct versus incorrect replies.

3. Sentiment Analysis Report: Evaluates user sentiment (positive, neutral, negative) based on the language and tone of interactions with the chatbot.

4. Intent Recognition Success Rate: Reports on how well the chatbot identifies and understands user intents, with metrics on successful and failed recognitions.

5. User Retention Report: Tracks how many users return to use the chatbot over time, providing insights into long-term user satisfaction.

6. Conversation Completion Rate: Measures the percentage of conversations that reach a successful resolution versus those that end without user satisfaction.

7. Response Time Report: Analyzes the average time the chatbot takes to generate a response, including metrics on delays or lag during conversations.

8. Error Rate Report: Provides data on how often the chatbot encounters errors or fails to understand user input, requiring fallback responses.

9. Fallback Usage Report: Tracks the number of times the chatbot falls back to predefined error messages or transfers users to human agents.

10. Conversion Rate Report: Measures how well the chatbot performs in achieving specific goals, such as lead generation, customer service resolution, or product purchases.