1. Top 3 Variables That Contribute Most to Lead Conversion:

The top three variables contributing most towards the probability of a lead getting converted, based on their high coefficients and significance, are:

- **Tags: Lost to EINS (coefficient: 10.2870)**: This variable shows a huge positive impact on conversion. Leads tagged as "Lost to EINS" have extremely high odds of converting, meaning they are very important and should be closely monitored.
- **Tags: Closed by Horizzon (coefficient: 9.7955)**: Leads tagged as "Closed by Horizzon" also have extremely high odds of converting. These leads are highly valuable and must be re-engaged or followed up quickly.
- **Tags: Will Revert After Reading the Email (coefficient: 5.0908)**: This tag signifies that these leads intend to revert after checking the email, and they have a very high chance of converting. X Education should follow up with these leads as they are likely to convert.

2. Top 3 Categorical/Dummy Variables to Focus on to Increase Lead Conversion:

To increase the probability of lead conversion, the following categorical variables/dummy variables should be prioritized:

- **Lead Source: Welingak Website (coefficient: 2.6791)**: Leads coming from the Welingak Website are much more likely to convert. Focusing on increasing traffic from this source, or creating specific campaigns targeting Welingak Website leads, can yield high conversions.
- **Current Occupation: Working Professional (coefficient: 2.1581)**: Leads who are working professionals are more likely to convert. X Education should create tailored marketing strategies aimed at working professionals by highlighting how the courses can benefit their career growth and offer flexible learning options.
- **Lead Quality: High in Relevance (coefficient: 3.1269)**: Leads classified as highly relevant are very likely to convert. Prioritizing these leads and focusing marketing and sales efforts on them will improve conversion rates.

3. Strategy for Making Aggressive Lead Conversions During Intern Hiring Period (2 Months):

During the intern hiring period, the sales team wants to aggressively convert all potential leads. Here's a suggested strategy:

- **Target High-Potential Leads:**
  - Focus efforts on leads that have been predicted as highly likely to convert based on the model. The interns should prioritize contacting leads tagged as **"Lost to EINS," "Closed by Horizzon,"** or **"Will Revert After Reading the Email."**
  - These tags represent the leads with the highest odds of conversion, so the team should make phone calls to these leads as a first priority.
- **Use SMS/Email for Lower Priority Leads:**

- For leads predicted to have a moderate chance of converting (based on the model), the sales team could first send personalized SMS or emails. If these leads respond positively, interns can follow up with phone calls.
- **Regular Follow-ups:**
  - Ensure interns follow up regularly with the high-potential leads who have not responded yet (especially leads tagged as "Busy"). Automating reminders and follow-up communication can help increase the probability of conversion.

4. Strategy for Minimizing Useless Phone Calls When Targets Are Met:

When the company has reached its target and wants to minimize unnecessary phone calls, they should adopt a **precision-first approach**. Here's a suggested strategy:

- **Focus Only on Leads with High Predicted Conversion Probability:**
  - The company should use the **optimal cutoff threshold** that balances precision and recall, which was determined earlier. By focusing on leads that have a very high probability of converting (with a predicted probability above the optimal threshold), the company can minimize wasted effort.
  - **Target high-precision leads**: Prioritize calling leads with tags like "Closed by Horizzon," "Will Revert After Reading the Email," and "Lost to EINS" since these lead tags show a high likelihood of conversion with minimal false positives.
- **Use Non-Phone-Based Communication for Other Leads:**
  - For leads with a lower probability of converting (but not zero), the company should adopt less resource-intensive communication methods, such as automated SMS, email campaigns, or chatbot interactions. Only escalate to phone calls if these leads show interest or engagement (e.g., by responding to emails or SMS).
- **Refinement of Lead Scoring Model:**
  - As part of a longer-term strategy, X Education can refine their lead scoring model further based on updated data from each quarter, which will help predict which leads should be prioritized for phone calls and which ones can be managed through less intensive communication.

Conclusion:

- **Aggressive Phase:** During high-aggression periods (intern phase), prioritize high-converting lead tags, send follow-up communications to those marked as "Busy," and make phone calls based on high predicted probabilities of conversion.
- **Precision Phase:** During periods of low phone call necessity (target met), focus on high-precision leads using the model's predicted probabilities, and use non-intrusive methods like SMS and email for other leads to minimize unnecessary phone calls.