Tortillas Restaurant Guest Count Prediction

Tortillas Restaurant Guest Count Prediction is a smart tool that forecasts how many guests will visit the restaurant each day. It uses past data and other factors like holidays to make its predictions. The system keeps everything anonymous, so it doesn't store personal information. It helps the restaurant plan better by predicting how busy it will be, so they can schedule staff and manage supplies efficiently.

The main goal of Tortillas Restaurant Guest Count Prediction is to help the restaurant run smoothly and give customers a great experience. It's an easy way for the restaurant to stay prepared and make sure they're ready for whatever the day brings.

Created by: Rowan_Battles
Created on: April 16, 2024 10:51 AM
Changed on: April 23, 2024 7:58 AM

Context of use: Education
Level of education: Bachelor

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Impact on society
What impact is expected from your technology?

What is exactly the problem? Is it really a problem? Are you sure?
One of the challenges businesses always face in the restaurant industry is the inability to predict the number of guests each day. Without a reliable way of predicting how many people will walk through the door, restaurants often deal with inefficiencies. Overstaffing leads to unnecessary labor costs, while understaffing can lead to long wait times, poor service, and dissatisfied customers. Also, incorrect estimates of guest counts can lead to excessive food preparation, resulting in wasted inventory and increased costs

Are you sure that this technology is solving the RIGHT problem?
There are probably worse problems in the world, like food waste. On the other hand, it would help restaurants if they are having trouble mangeing it, with staff for example, or a lack of space for stock. It could reduce stress for the manager and other stakeholders, because you get an insight of what to expect for the week.

How is this technology going to solve the problem?
By analyzing various data points such as historical visitor data, local events, and weather conditions, and other factors, the system generates estimations of future demand. While no solution is guaranteed to work perfectly, thorough research, testing, and validation processes the reliability and accuracy of the technology will be monitored.

What negative effects do you expect from this technology?
If the predictions turn out to be wrong, and the restaurant relies too much on them, it could mess up their plans for the week. Then, if the restaurant fails, it's unclear who's to blame. They might point fingers at the technology for giving bad predictions, or they might blame themselves for relying too much on them. Relying too heavily on predictions could also make restaurant owners less flexible and creative when dealing with unexpected situations. If the predictions suddenly stop working, they might struggle because they haven't learned how to think on their own.

In what way is this technology contributing to a world you want to live in?
This technology contributes to a world I want to live in by improving efficiency and reducing waste in the restaurant industry. It helps restaurant managers better anticipate customer demand and make better decisions about staffing and inventory. From an employee perspective, it's reassuring to know how

many coworkers will be present on a given workday. Working alone can be stressful, and having too few colleagues can lead to wasted costs.

Now that you have thought hard about the impact of this technology on society (by filling out the questions above), what improvements would you like to make to the technology? List them below.

As mentioned earlier, the technology may not have a significant impact on society overall. Its primary benefit lies in assisting new restaurants in gaining insights into customer patterns to assess profitability and make informed decisions about their future operations. However, there is a potential challenge in accessing historical data required for accurate predictions, which could limit its effectiveness for new establishments. Given these limitations, it may be challenging to identify significant improvements to the technology.

Hateful and criminal actors

What can bad actors do with your technology?

This category is not applicable for this technology.

Privacy

Are you considering the privacy & personal data of the users of your technology?

This category is not applicable for this technology.

Human values

How does the technology affect your human values?

This category is not applicable for this technology.

Stakeholders
Have you considered all stakeholders?

This category is only partial filled.

Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by answering these questions.

Name of the stakeholder
Randy van den Broek

How is this stakeholder affected?

In a positive way. Knowing how many customers to expect each day reduces stress and lets the boss plan better. It means making smarter decisions about things like inventory and staffing, which leads to saving money. For example, they can decide when to open the upstairs area or how many staff members to schedule based on actual data. This makes the restaurant run smoother and keeps customers happy by reducing wait times. Also, it helps with long-term planning, like deciding what food to offer or how to set prices. Overall, using predictive analysis makes running Tortillas easier and more successful for the boss.

Did you consult the stakeholder?
Yes

Are you going to take this stakeholder into account?
Yes

Did you consider all stakeholders, even the ones that might not be a user or target group, but still might be of interest?

Name of the stakeholder
Kokerij

How is this stakeholder affected?
Not at all. Suppliers usually have set routines for supplying food, like doing inventory weekly and providing a standard amount of food. Tortillas' predictions wouldn't change these routines much. So, the supplier's operations would likely stay the same, with or without Tortillas using predictive analysis.

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Name of the stakeholder
Customers

How is this stakeholder affected?
It can have a postive influence for the customers. By knowing how many people will come, Tortillas can plan the right number of staff. This means less waiting and a better dining experience for customers.

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Now that you have thought hard about all stakeholders, what improvements would you like to make? List them below.
This question has not been answered yet.

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Data
Is data in your technology properly used?

This category is only partial filled.

Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into account in the technology?
Yes, I understand the pitfalls. The technology uses various features like past trends and weather conditions to make predictions, but it's hard to be exact.

How does the technology organize continuous improvement when it comes to the use of data?
This question has not been answered yet.

How will the technology keep the insights that it identifies with data sustainable over time?
This question has not been answered yet.

In what way do you consider the fact that data is collected from the users?
This question has not been answered yet.

Now that you have thought hard about the impact of data on this technology, what improvements would you like to make? List them below.
This question has not been answered yet.

Inclusivity
Is your technology fair for everyone?

This category is only partial filled.

Will everyone have access to the technology?
This question has not been answered yet.

Does this technology have a built-in bias?
No, the technology itself does not inherently have a built-in bias. However, it's essential to be mindful of historical biases that may exist within the data used to train the predictive models.

Does this technology make automatic decisions and how do you account for them?
This question has not been answered yet.

Is everyone benefitting from the technology or only a a small group? Do you see this as a problem? Why/why not?
This question has not been answered yet.

Does the team that creates the technology represent the diversity of our society?
This question has not been answered yet.

Now that you have thought hard about the inclusivity of the technology, what improvements would you like to make? List them below.
This question has not been answered yet.

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Transparency

Are you transparent about how your technology works?

This category is only partial filled.

Is it explained to the users/stakeholders how the technology works and how the business model works?

Yes, it's important to ensure that users and stakeholders understand how the technology works and how the business model operates. For example, I proposed the idea to Randy, the restaurant owner, and he liked the concept. The idea is creating a user-friendly dashboard that presents the predictive insights in a clear and straightforward manner.

If the technology makes an (algorithmic) decision, is it explained to the users/stakeholders how the decision was reached?

This question has not been answered yet.

Is it possible to file a complaint or ask questions/get answers about this technology?

This question has not been answered yet.

Is the technology (company) clear about possible negative consequences or shortcomings of the technology?

This question has not been answered yet.

Now that you have thought hard about the transparency of this technology, what improvements would you like to make? List them below.

This question has not been answered yet.

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Sustainability
Is your technology environmentally sustainable?

This category is only partial filled.

In what way is the direct and indirect energy use of this technology taken into account?
The technology should integrate seamlessly with Tortillas' existing PC infrastructure, minimizing any additional energy consumption.

Do you think alternative materials could have been considered in the technology?
This question has not been answered yet.

Do you think the lifespan of the technology is realistic?
This question has not been answered yet.

What is the hidden impact of the technology in the whole chain?
This question has not been answered yet.

Now that you have thought hard about the sustainability of this technology, what improvements would you like to make? List them below.
This question has not been answered yet.

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Future
Did you consider future impact?

This category is only partial filled.

What could possibly happen with this technology in the future?
The technology could change how restaurants work, making them more efficient and giving customers better experiences. It might also change how people eat out and how restaurants manage their money. But, using lots of data could mean more rules about how it's used and who can see it.

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one utopian scenario.
This question has not been answered yet.

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one dystopian scenario.
This question has not been answered yet.

Would you like to live in one of this scenario's? Why? Why not?
This question has not been answered yet.

What happens if the technology (which you have thought of as ethically well-considered) is bought or taken over by another party?
This question has not been answered yet.

Impact Improvement: Now that you have thought hard about the future impact of the technology, what improvements would you like to make? List them below.
This question has not been answered yet.