

Summary: CustServer is going to be our branded AI that will serve as a customer service chatbot for small businesses that may not have the manpower to employ. Our AI will function as a replacement to this and we are aiming to support at least 10 small businesses with our AI.

Objective: CustServer will achieve seamless, easy operation for small businesses through AI learning and minimal manual setup. The system must be developed to accommodate the specific needs of small business owners who may lack technical expertise or resources to manage complex customer service platforms. Developing a more general program could lead to features being missing, whereas developing a more complex system could mean that business owners may not fully understand it. Key stakeholders would include the small business owner, the customers using the AI for support, and any employees interacting with the system. Additionally, other parties, such as external vendors or partners relying on timely support, may also be impacted and are considered stakeholders.

Metrics: To monitor effectiveness we can track small business satisfaction through surveys post-setup and during the early stages of AI use to ensure it's easy to configure. We can also monitor the number of support tickets related to setup issues to help gauge where users encounter challenges.

Expected Ethical impact Risk Table:

Stakeholder	Financial Risk	Privacy	Conflicting interest
Small business owners (SBO)	high	low	mid
employees	low	low	low

customers	low	high	low
AI developer	mid	high	high

SBO: The financial risk of the SBOs is high considering that if they buy our AI, and some issue ends up with it not fully working or it making mistakes, their purchase ends up worthless and they could end up losing customers. Privacy risk is low because it usually is not the SBOs data being handled by the AI. Conflicting interest is mid because they could always have the option to train a human for this job.

Employees: Financial risk is low because there is a small chance that some employees get replaced by this AI. Privacy risk is low for the same reason as the SBO. Conflicting interest is low because they may also have to help train the AI.

Customer: Customers are unlikely to be at financial risk unless a fault in the AI ends in a billing error. Customers are at high privacy risk due to how their information is being handled by the AI.

AI Developer: We have a high financial risk because developing this AI to be usable by many while still being good enough has a large impact on sales. Our data is not entered so we have low privacy risk.

One important ethical issue regarding failure of the AI resulting in losses, and who should be held liable. I can relate this to many cases involving Tesla and their autopilot AI resulting in crashes and accidents possibly being fatal. For the most part, in these cases, Tesla, the provider of the AI, was not liable due to negligence in following instructions by their customers. In the case of the fatal crash of Walter Huang in 2018, however, a verdict was not issued and Tesla settled. This may not be a 1 to 1 comparison between our business, but I believe it can be compared. If setting up our AI is not straightforward, it could lead to problems that call into question who can be held liable.

Safeguards: To reduce the risks for small business owners, CustServer should include a guided, user-friendly AI setup process with detailed error-checking features to ensure that the AI is configured correctly. We start with an interactive interface that guides users through step-by-step configuration with easy-to-understand options for tailoring the AI to their specific customer service needs. We can also have built-in testing tools that simulate customer interactions to ensure that the AI is functioning as intended before going live. We have to make sure that we allow business owners to easily intervene or manually override the AI when complex queries arise, which can help prevent costly errors.

This safeguard would include consultation from UI/UX experts to design an intuitive interface and AI experts to ensure the system's stability and testing mechanisms. Additionally, ethical AI experts could be consulted to ensure that the process minimizes risks to the SBO and ensures that liability isn't shifted unfairly to the business owner.

For our implementation we should develop and release regular updates to the AI's setup and error-checking capabilities based on user feedback to reduce the risk of faulty configurations. At the start we can partner with small businesses to beta-test the product and adjust based on real-world use cases.

One reference that supports this safeguard is the paper published by Microsoft titled "Guidelines for Human-AI Interaction"[1], which claims that AI systems should prioritize ease of use, user control, and clear feedback mechanisms.

References:

[1] "Guidelines for Human-AI Interaction", Microsoft (2019)