



NAME: Shopsphere

DATE: July 3, 2025 1:07 AM


DESCRIPTION OF TECHNOLOGY

E-commerce application tict scan



HUMAN VALUES

Users provide personal information to create accounts and make purchases. Their identity becomes part of the platforms data, which must be protected to avoid misuse, identity theft, or unauthorized access. Proper security and privacy measures are essential to protect their personal identity.

TRANSPARENCY


Yes. The platform provides documentation and clear explanations for stakeholders about how the system operates, how data is handled, and how revenue is generated (e.g. through product sales, service fees, or transaction fees). Transparency helps build trust with both users and business partners.

IMPACT ON SOCIETY

Many e-commerce platforms struggle with growth because their monolithic architectures make it difficult to scale, update, and integrate new services.
Yes, it slows development, increases maintenance costs, and creates risks of system failures when changes are made.
Yes, this is a well-known issue. Companies adopt microservices to improve scalability, flexibility, and reduce failure points.

STAKEHOLDERS


- Users
- Admins
- Developers

SUSTAINABILITY

The system is designed using cloud infrastructure, which allows for optimized resource usage and scalability. By using containerization and microservices, only the necessary resources are used at any time. Indirect energy use depends on data center efficiency, which is partly addressed by choosing cloud providers that invest in energy-efficient operations.

HATEFUL AND CRIMINAL ACTORS


ShopSphere, like any e-commerce platform, could be misused for illegal activities such as selling prohibited products, money laundering, tax evasion, or fraudulent transactions. Its flexibility may allow users to hide illegal operations behind multiple services. Without proper monitoring and compliance measures, it may also be used to avoid financial regulations or consumer protection laws.

DATA


Yes. We are aware that data can be incomplete, outdated, incorrect, or biased. In ShopSphere, data validation, access controls, regular updates, and backups are implemented to minimize these risks. Privacy and security measures are also in place to protect sensitive data and ensure data quality.

FUTURE

In the future, ShopSphere could expand with AI-driven recommendations, advanced analytics, and global scalability. It may also integrate more payment providers, shipping services, and support for multiple marketplaces. However, future risks include increased data privacy challenges, higher security demands, and the need to constantly update to meet regulations and customer expectations.

PRIVACY

Yes. ShopSphere collects personal data such as names, email addresses, phone numbers, shipping addresses, payment information, and order history for users and customers.

INCLUSIVITY

The core technology itself does not have a built-in bias. However, biases can occur based on how the system is configured or how data is entered, for example in product recommendations, pricing algorithms, or customer targeting if such features are added. Careful design and monitoring are required to avoid unintended bias.

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IMPACT ON SOCIETY



What is exactly the problem? Is it really a problem? Are you sure?

Can you exactly define what the challenge is? What problem (what 'pain') does this technology want to solve? Can you make a clear definition of the problem? What 'pain' does this technology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine...


HATEFUL AND CRIMINAL ACTORS



In which way can the technology be used to break the law or avoid the consequences of breaking the law?

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers to evade speed radars or using bitcoins to launder...


PRIVACY



Does the technology register personal data? If yes, what personal data?

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like...

HUMAN VALUES



How is the identity of the (intended) users affected by the technology?

To help you answer this question think about sub questions like:

- If two friends use your product, how could it enhance or detract from their relationship?
- Does your product create new ways for people to interact?...

STAKEHOLDERS




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

When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology.

...

DATA




Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into...

There are fundamental issues with data. For example:

- Data is always subjective;
- Data collections are never complete;
- Correlation and causation are tricky concepts;
- Data collections are often biased;...


INCLUSIVITY



Does this technology have a built-in bias?

Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the case? Be critical. Be aware of your own biases....


TRANSPARENCY



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

- Is it easy for users to find out how the technology works?
- Can a user understand or find out why your technology behaves in a certain way?
- Are the goals explained?
- Is the idea of the technology explained?
- Is the technology company transparent about the way their...


SUSTAINABILITY



In what way is the direct and indirect energy use of this technology taken into account?

One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?

FUTURE



What could possibly happen with this technology in the future?

Discuss this quickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?

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