ring doorbell

The Ring video doorbell is a smart home security device that integrates a video camera, motion detection, and two-way audio, enabling users to monitor their front door remotely via a smartphone app. As part of the broader Internet of Things (IoT) ecosystem, Ring has become widely adopted for enhancing residential safety and convenience.

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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?
The Ring video doorbell aims to make homeowners feel safer by letting them see and speak to visitors remotely. It helps prevent theft and offers more control when not at home. However, it can also make users more anxious or suspicious, constantly checking the app. At the same time, people being recorded,like neighbors or passers-by,may feel uncomfortable or invaded, as if theyre always being watched. So while the technology solves one problem, it can create new ones around privacy and trust.

Are you sure that this technology is solving the RIGHT problem?
While the Ring doorbell solves a practical problemlike missing deliveries or not knowing whos at the doorit may only address the symptom, not the deeper issue. If we ask why several times, we get to something bigger: people feel unsafe or dont trust others in their neighborhood. The real issue might be fear, social disconnection, or lack of communitynot just the need for a camera. So no, Im not sure this is the right solution. It helps in the short term, but it could also make people more suspicious and isolated, instead of improving safety in a deeper, more human way.

How is this technology going to solve the problem?
The Ring doorbell tries to solve the problem by giving users live access to their doorstep through video, motion alerts, and two-way audio. These features aim to reduce fear and increase a sense of control. While it often works in practicemany users report feeling saferit doesnt always solve the deeper issue. In fact, some users become more anxious, constantly checking the app or reacting to harmless activity. Research shows that Ring can unintentionally increase surveillance behaviors and lead to privacy concerns for others nearby. As Wired points out, Ring footage impacts everybodys privacy, not just the people who buy the devices (Wired, 2022). A broader literature review also confirms that smart doorbells may increase stress and reduce neighborhood trust (Alrawi et al., 2022).

What negative effects do you expect from this technology?
One expected negative effect is that people might start checking the app constantly, becoming more anxious or suspicious instead of feeling safer. Ive also seen how neighbors who are filmed without consent feel uncomfortable or even angry, especially if the camera points at their windows or shared spaces. A less obvious effect is that it might reduce social trustpeople start relying on cameras instead of talking to their neighbors. I accept some of these side effects because the technology can help in real situations, like

theft, but we should be more aware of how it changes behavior and relationships over time.

In what way is this technology contributing to a world you want to live in?

In the short term, Ring gives people more control over their front door. It makes daily life easierlike asking a delivery person to leave a package or checking who rang the bell without opening the door. But in the long term, I think it changes how we behave. People may become more suspicious, feel watched, or rely too much on the app instead of talking to neighbors. On a broader level, Ring adds to a society where surveillance becomes normal, even in private neighborhoods. Personally, I value safety, but also trust, freedom, and privacy. Ring partly fits those values, but not fullyit can make people feel safe, but also watched. Professionally, I believe in responsible tech use, and that includes being aware of others' rights. Im not fully convinced it supports the kind of open, trusting society Id want to live in.

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.

To make the Ring doorbell more responsible, things should change. The device should have a clear signlike a lightso people know theyre being recorded. Setting up privacy zones should be easier and required, and people not at the door could be blurred automatically. There should also be more awareness in neighborhoods about how these cameras affect others. Local rules could help guide where they can be aimed. In the app, users should get reminders about privacy and have a way to report if someone misuses footage.

Hateful and criminal actors
What can bad actors do with your technology?

In which way can the technology be used to break the law or avoid the consequences of breaking the law?
Yes, Ring can be used to break the law. People might aim the camera at neighbors windows or shared spaces, invading privacy. Others could share footage online to harass or shame someone. If a user deletes recordings, they could hide their own bad behavior. A bigger risk is hackingif someone gets into a Ring account, they can see when someone leaves the house, which could lead to stalking or burglary. Even though its designed for safety, the technology can be misused in harmful ways, especially if people arent aware of the risks.

Can fakers, thieves or scammers abuse the technology?
Yes, I think fakers, thieves, or scammers could abuse the Ring doorbell. Someone could pretend to be a delivery person or neighbor to trick people into opening the door. The camera footage could be used to track someones routine or target a house when no one is home. People might also use clips to insult or shame others online, especially if taken out of context. In neighborhoods, this can create tension or distrust, especially if certain groups are recorded more often. So yes, the technology can cross personal and even societal boundaries if misused.

Can the technology be used against certain (ethnic) groups or (social) classes?
Yes, Ring can be used in ways that harm or discriminate against certain groups. For example, people might be more likely to report or share videos of people from certain ethnic backgrounds because of bias or stereotypes, even if theyre doing nothing wrong. In some cases, neighborhood groups share footage that targets specific groups, which can lead to profiling or tension.

In which way can bad actors use this technology to pit certain groups against each other? These groups can be, but are not constrained to, ethnic, social, political or religious groups.
Yes, I can imagine bad actors using Ring to create tension between groups. For example, sharing videos of certain ethnic or social groups in neighborhood apps or social medialabeling them as suspiciouscan fuel racial profiling and fear, even without real evidence. This can make some people feel unsafe or unwelcome in certain areas.

How could bad actors use this technology to subvert or attack the

truth?

Bad actors could use Ring footage to manipulate or distort the truth. For example, sharing short clips out of contextlike someone standing near a doorcan make it look suspicious even if its innocent. This can spread fear or false accusations. Footage could also be edited or combined with fake audio to create misleading videos, similar to deepfakes. In the future, AI tools might make it even easier to change or fake what the camera recorded. This way, the technology could be used to spread misinformation, damage reputations, or support biased narratives.

Now that you have thought hard about how bad actors can impact this technology, what improvements would you like to make? List them below.

To reduce misuse, Ring should add watermarks and timestamps to all shared footage to prevent editing. It could also include blurring tools or tags to give more context and avoid misinterpretation. There should be stricter rules on where and how footage is shared, especially in neighborhood apps. The app itself could show warnings about bias and how videos can harm others if shared unfairly. A simple report button could help flag videos that are used to spread fear or target certain groups.

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

Does the technology register personal data? If yes, what personal data?
Yes, the Ring doorbell collects personal data. It records video, audio, faces, and movement, even of people who havent given permission. It also stores timestamps and activity patterns, which can show when someone is home or away. This type of data can identify individuals, so privacy laws like the GDPR apply, and careful handling is important.

Do you think the technology invades the privacy of the stakeholders? If yes, in what way?
Yes, I think the Ring doorbell can invade the privacy of stakeholders, especially neighbors, delivery workers, or passers-by who are filmed without consent. People might feel watched, even when theyre just walking by. While the goal is safety, the technology doesn't always follow principles like proportionality or subsidiarity. So yes, many people could feel their privacy is unfairly affected.

Is the technology is compliant with prevailing privacy and data protection law? Can you indicate why?
Ring claims to be GDPR-compliant, but in practice, that depends on how users set it up. The system records people without consent, which can be a problem under GDPRespecially in shared or public areas. Ring provides some tools, like privacy zones and data access options, but many users dont use them properly. So while the technology can be compliant, it often isnt in daily use, unless users actively follow the rules.

Does the technology mitigate privacy and data protection risks/ concerns (privacy by design)? Please indicate how.
Ring includes some privacy by design features, like motion zones, privacy zones, and data encryption, but these are often optional and not always easy to set up. The system records more data than strictly necessaryfor example, it sometimes captures entire streets or neighbors windows, which goes against data minimisation. While some tools are in place, they depend too much on the user making the right choices. So overall, the technology could do more to actively protect privacy by default, not just offer the option.

In which way can you imagine a future impact of the collection of personal data?

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In the future, the data Ring collects could have serious long-term effects. If videos are saved or shared online, they might follow people for years, even for small or innocent actions. Being recorded without consent could harm someones reputation or relationships, especially if taken out of context. Theres also the risk that companies or governments could use this data for surveillance or profiling, limiting peoples freedoms or opportunities later in life.

Now that you have thought hard about privacy and data protection, what improvements would you like to make? List them below.
To protect privacy, Ring should enable privacy zones and face blurring by default. The app should help users set up privacy-friendly settings easily. Also, footage should auto-delete after a short time unless the user chooses otherwise. Clear in-app info about privacy laws like GDPR would help users make better choices. These changes make the tech safer without taking away its main function.

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Human values
How does the technology affect your human values?

How is the identity of the (intended) users affected by the technology?
The Ring doorbell can affect how users see themselves and how others see them. It may make people feel more in control or responsible, but also more suspicious or anxious. It can change how neighbors interactless face-to-face contact, more watching from a distance. Some may see it as empowering, while others may feel it shows distrust or fear. It also replaces small social moments, like greeting a delivery person, with automated interactions

How does the technology influence the users' autonomy?
Ring can both support and limit users autonomy. It helps users decide when to answer the door or check activity, which feels empowering. But it can also make people dependent on constant notifications, and some check the app obsessively. Its not always easy to disconnect. In some cases, it may even replace users own judgment with surveillance. So while it offers control, it can also reduce real independence over time.

What is the effect of the technology on the health and/or well-being of users?
Ring can have both positive and negative effects on well-being. It can make users feel safer and more in control, especially when theyre not home. But it can also lead to stress or anxiety, especially if users check it constantly or feel the need to monitor everything. Some people might become more paranoid or distracted, which could negatively affect their mental health over time.

Now that you have thought hard about the impact of your technology on human values, what improvements would you like to make to the technology? List them below.
To better support human values, I would improve Ring by making it less stressful and more balanced for users. The app could include usage reminders or quiet hours to reduce obsessive checking. It should also show positive nudges, like encouraging face-to-face interaction when safe. Clearer guidance on when and how to use it responsibly would protect peoples autonomy, well-being, and relationships.

Stakeholders

Have you considered all stakeholders?

This category is not applicable for this technology.

Data

Is data in your technology properly used?

This category is not applicable for this technology.

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Inclusivity

Is your technology fair for everyone?

This category is not applicable for this technology.

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Transparency

Are you transparent about how your technology works?

This category is not applicable for this technology.

Sustainability

Is your technology environmentally sustainable?

This category is not applicable for this technology.

Future

Did you consider future impact?

This category is not applicable for this technology.