

SRLS S64-1

Self regulated learning system

Created by: s64-1
Created on: February 20, 2020 12:01 PM
Changed on: March 2, 2020 10:19 AM

Technology Impact Cycle Tool

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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?

Students need feedback on their progress

Are you sure that this technology is solving the RIGHT problem?

We are giving them feedback

How is this technology going to solve the problem?

It generates it automatically without the need for a teacher to do everything

What negative effects do you expect from this technology?

Less personal contact

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

It supports an already existing project and makes it more efficient

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.

not yet

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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?

Not

Can fakers, thieves or scammers abuse the technology?

A teacher might ask too personal questions based on the feedback generated.

Can the technology be used against certain (ethnic) groups or (social) classes?

No

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.

They can group certain users together while they are not associated

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

People can input wrong info for training the AI hence generating a wrong model.

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

no

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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, all reports generated are stored.

Do you think the technology invades the privacy of the stakeholders? If yes, in what way?

No, reports are made on the request of users and only uses their data.

Is the technology is compliant with prevailing privacy and data protection law? Can you indicate why?

Yes, as its build around GDPR and AVG. Users have full control over their data in the system.

Does the technology mitigate privacy and data protection risks/ concerns (privacy by design)? Please indicate how.

Users have full control over their data in the system.

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

If this data gets leaked it could have consequences for a user because it highlights all their weak professional skills

Now that you have thought hard about privacy and data protection, what improvements would you like to make? List them below.

no

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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?

It gives them insight into their own personality

How does the technology influence the users' autonomy?

It informs students about their progress so they can make better decisions to reach their goals.

What is the effect of the technology on the health and/or well-being of users?

It could impact their mental health if the feedback is harsh.

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.

no

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Stakeholders

Have you considered all stakeholders?

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

Name of the stakeholder

Student

How is this stakeholder affected?

beter leerproces

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Name of the stakeholder

Teacher

How is this stakeholder affected?

Heeft extra info voor het begeleidingstraject van leerlingen

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Name of the stakeholder

Onderwijsdeskundige

How is this stakeholder affected?

Moet controleren

Moet vragenlijsten maken

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

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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

AI researcher

How is this stakeholder affected?

Uses it for its research

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Name of the stakeholder

Scholen

How is this stakeholder affected?

Uses it to streamline their student feedback process

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Name of the stakeholder

Semester coach

How is this stakeholder affected?

Uses it as a tool to improve the semester

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Now that you have thought hard about all stakeholders, what improvements would you like to make? List them below.

not yet

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Data

Is data in your technology properly used?

Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into account in the technology?
yes we are aware. AI-researchers can interpret the data in a wrong way.

How does the technology organize continuous improvement when it comes to the use of data?
the AI is continuously developed

How will the technology keep the insights that it identifies with data sustainable over time?
Yes everything is configurable

In what way do you consider the fact that data is collected from the users?
All the data about a user can be deleted if they request it.

Now that you have thought hard about the impact of data on this technology, what improvements would you like to make? List them below.
no

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Inclusivity

Is your technology fair for everyone?

Will everyone have access to the technology?

Only students

Does this technology have a built-in bias?

No only if the data is skewed

Does this technology make automatic decisions and how do you account for them?

It will have to be verified by the researchers that create the AI.

Is everyone benefitting from the technology or only a a small group?

Do you see this as a problem? Why/why not?

All students will benefit from our technology

Does the team that creates the technology represent the diversity of our society?

We see everyone as equal so we think it will represent the diversity of society.

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

no

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Transparency

Are you transparent about how your technology works?

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

There will be disclaimers showing what is used.

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

We give them the reasoning of the AI and why it reached its conclusions

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

No its not

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

Yes as AI's arent always accurate

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

no

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Sustainability

Is your technology environmentally sustainable?

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

yes. Students create it and maintain it so it doesnt cost anything and it runs on efficient servers.

Do you think alternative materials could have been considered in the technology?

Yes, none of our building blocks isnt sustainable

Do you think the lifespan of the technology is realistic?

Yes, it uses servers to host the software.

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.

no

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Future

Did you consider future impact?

This category is not applicable for this technology.