

# Potential Impact Assessment

Genuine Challenge 1: Prediction of Fifa player values

Created by: piemann96  
Created on: April 25, 2021 9:54 AM  
Changed on: April 25, 2021 10:35 AM

# Technology Impact Cycle Tool

Potential Impact Assessment

---

## Impact on society

What impact is expected from your technology?

*This category is only partial filled.*

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

The problem this project tackles is the unfair distribution of players values, where external factors (non-football related) influence the value of a player. It also tackles the lack of a fair distribution of knowledge, where a football manager affiliated with a player has a lot more information about that players value than a potential buyer (a football club), giving them an unfair edge in negotiations.

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

*This question has not been answered yet.*

### **How is this technology going to solve the problem?**

*This question has not been answered yet.*

### **What negative effects do you expect from this technology?**

*This question has not been answered yet.*

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

*This question has not been answered yet.*

### **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.**

*This question has not been answered yet.*

# Technology Impact Cycle Tool

Potential Impact Assessment

---

## Hateful and criminal actors

What can bad actors do with your technology?

*This category is only partial filled.*

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

When an external person is able to influence the provided data that is used to train this model, the outcomes will not be accurate, rendering the model useless.

When a person is able to modify the statistics about a player the value is to be predicted of, the outcome will differ from reality and might be used to influence the negotiations for this particular player.

### **Can fakers, thieves or scammers abuse the technology?**

*This question has not been answered yet.*

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

*This question has not been answered yet.*

### **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.**

*This question has not been answered yet.*

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

*This question has not been answered yet.*

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

*This question has not been answered yet.*

# Technology Impact Cycle Tool

## Potential Impact Assessment

---

### Privacy

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

*This category is only partial filled.*

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

The data used in this model uses some personal data, most of it is dropped from the original dataset (like date of birth, since it is useless when the age is known in the current context of this project), however for convenience the names of the players are saved in the entries (but not used for training the model).

All the data that has been used for this project is publicly accessible and therefore in compliance with all privacy regulations.

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

*This question has not been answered yet.*

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

*This question has not been answered yet.*

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

*This question has not been answered yet.*

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

*This question has not been answered yet.*

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

*This question has not been answered yet.*

# Technology Impact Cycle Tool

## Potential Impact Assessment

---

### Human values

How does the technology affect your human values?

*This category is only partial filled.*

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

The model that will be produced in this project will have little to no influence on the identity of the user.

Some users (players whoms value is to be predicted) might be disappointed or over the moon with the result of the predicted value, when this influences the identity of the user, I am of the opinion that this is not due to the technology, but more due to the personal traits these persons have.

### How does the technology influence the users' autonomy?

*This question has not been answered yet.*

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

*This question has not been answered yet.*

### 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.

*This question has not been answered yet.*

# Technology Impact Cycle Tool

Potential Impact Assessment

---

## 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

Fifa (Fédération Internationale de Football Association)

### How is this stakeholder affected?

-

### Did you consult the stakeholder?

Yes

### Are you going to take this stakeholder into account?

Yes

### Name of the stakeholder

Football players

### How is this stakeholder affected?

-

### Did you consult the stakeholder?

Yes

### Are you going to take this stakeholder into account?

Yes

### Name of the stakeholder

Football players agents

### How is this stakeholder affected?

-

### Did you consult the stakeholder?

Yes

### Are you going to take this stakeholder into account?

Yes

# Technology Impact Cycle Tool

## Potential Impact Assessment

---

Name of the stakeholder

Football clubs

**How is this stakeholder affected?**

-

**Did you consult the stakeholder?**

Yes

**Are you going to take this stakeholder into account?**

Yes

**Name of the stakeholder**

Football leagues

**How is this stakeholder affected?**

-

**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?**

-

**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.*

# Technology Impact Cycle Tool

## Potential Impact Assessment

---

### 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?**

The way the statistics of players are measured are unclear to me, as previously stated in the project proposal, these measurements will be considered as a black-box during this project.

However, when thinking about it, these are probably human evaluations and are therefore prone to bias (a player in a major league might get improved statistics compared to an identical player from a minor league).

I dont think its realistic to remove this bias at this point in time.

#### **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.*

# Technology Impact Cycle Tool

Potential Impact Assessment

---

## 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?

As mentioned in the question above (the pitfalls of the shortcomings in the data), it is likely the scores of particular player skills are prone to bias and since this data will be used to train the model there is a risk the model would have built-in bias, to minimize the effect of this potential bias, new values will be derived from the measured data to minimize the influence of personal bias from the persons that 'measured' this data.

## 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.*

# Technology Impact Cycle Tool

## Potential Impact Assessment

---

### 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?**

The technology will be fully transparent throughout this project, every input variable will be made public and the way the technology is supposed to work will be shared with the general public.

Since there is no intention of making money from this project, there is no business model to be disclosed.

#### **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.*

# Technology Impact Cycle Tool

Potential Impact Assessment

---

## 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 energy use of this technology is minimal.

The indirect energy use to acquire the data (which has been done for us) is difficult to take into account since there is no transparency of the sustainability of the acquiring of this data.

Besides that the direct energy use for this project will mostly be for scraping the data from the web and training the model with the dataset.

The use of the predictive function of this project will be demand based (ie: it will only be active when it get a request)

### **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.*

# Technology Impact Cycle Tool

## Potential Impact Assessment

---

### Future

Did you consider future impact?

*This category is only partial filled.*

#### **What could possibly happen with this technology in the future?**

In the future, other aspects of a football player might influence their value. If that were to be the case the model needs to be updated to the most current factors that influence the players value.

Also the value of money needs to be taken into account, when a players value is predicted the value of money is not taken into account (for example 10 euros in 2021 is worth way less in relative terms than 10 euros in 2011), which might be improved in the future

**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.*