# The Data Cards Playbook

A toolkit for purposeful and people-centric dataset documentation for transparency in AI systems.

https://pair-code.github.io/datacardsplaybook/

#datacardsplaybook





THE DATA CARDS PLAYBOOK

# Introduction 01 Ask **02 Inspect 03 Answer** 04 Audit



THE DATA CARDS PLAYBOOK

# Map your Stakeholders

IN THIS SECTION

Create a map of stakeholders in your dataset(s) lifecycle. Use this to decide the audience of your Data Card(s).

#### INSTRUCTIONS

Use the Typology of Stakeholders to identify stakeholders who will produce and/or interact with your dataset(s)' documentation. Decide how they may might contribute to the creation of Data Cards(s), or use them.

OUTCOMPMES

Produce a map of stakeholders in your dataset's lifecycle(s) that highlights key touchpoints where they interact with documentation.

ACTIVITY LEVEL Basic

Stakeholders in a dataset's lifecycle can be bucketed into three categories

# **Producers = create datasets and/or** documentation

**Agents = use, evaluate, or determine** how the dataset is or should be used

Users = contribute to data and represent demographics who are impacted by the way data is used





# **PRODUCERS** of datasets and documentation

#### **AGENTS**

use datasets and documentation



Dataset Ownership Launch and Maintenance Dataset Use Pipeline Maintenance

# **USERS** interact with products using data



#### Product Experience Data Contribution



# **Producers = create datasets and/or documentation**

#### SOURCE

People who implicitly or explicitly contribute data towards a dataset. The people, behaviors, and cultures represented by a dataset.

Product Users, Data Contributors, Surveyed Population

#### CORE

The team of people responsible for producing and publishing dataset(s) and launch, adoption and/or success.

Researchers, Data Scientists, Software Engineers, Managers, Subject Matter Experts

#### ADJACENT

Individuals and groups recruited to collect or label the data, provide advice on methods or interpretation, at various points during the data lifecycle.

Surveyors, Raters, Labellers, Validators, 3rd Party Vendors, Domain Experts

#### IMPACTED

Current and future team members, partners, clients, or data-hosting platforms, responsible for dataset maintenance or upkeep, deploying in production, monitoring.

Domain Experts, Data Platform Owners, Data Aggregators

# Who are Producers in your dataset(s)? Write who will create Data Card(s).

#### SOURCE

Who implicitly or explicitly contributes data towards your dataset?

hames, job roles,
departments, affiliations,
etc.

#### CORE

Who all are responsible for producing, publishing and ensuring success of your dataset(s)?

#### ADJACENT

Who all have been recruited to produced data or advice on critical decisions?



IMPACTED

Who are responsible for dataset maintenance or upkeep, deploying in production, monitoring?



## Agents = use, evaluate, or determine how the dataset is used or should be used

#### CORE

Industry and academic roles that use dataset(s) in their products, platforms, tools, and research.

Developers, Product Managers, Data Scientists, Creative Coders, Researchers, Teachers, Students

#### **ADJACENT**

Roles that don't use the dataset, but evaluate and make decisions that can directly affect the goals of the producers or core agents.

Industry Consultants, Policy Experts, Legal Entities, Investigative Journalists, Community Reps, Domain Experts

#### **IMPACTED**

Professional, expert-system, and domain expert roles whose work is affected by availability, updates, and removal of the data.

Domain Experts, Data Service Providers, Data Aggregators, Production Roles

### Who are Agents in your dataset(s)? Write who will read and use Data Card(s).

Use this to determine which group(s) of data users might need quick or more detailed, technical descriptions about the data or the dataset to help them make decisions.

#### CORE

Who will use your dataset(s) in production, tooling and research?

hames, job roles,
departments, affiliations,
etc.

#### ADJACENT

Who will make critical decisions about the data but may not use it?



#### IMPACTED

Who will be affected by changes, updates, and removal of the data?



Users = contribute to data and represent demographics who are impacted by the way data is used

#### **TYPICAL**

Individuals or cohorts of users of a product or service that uses the data, and have an as-expected or neutral experience.

Consumers of products, platforms, or services

#### **IMPACTED**

Individuals or cohorts of end users of products and services who are significantly affected (positive or negative) as a result of the data being used in the product or service.

Users with extreme experiences, Non-profit organizations, Legal representatives

#### **CONTRIBUTORS**

Users who produce or opt-in data in the product experience, which is then collected and turned into a dataset. In this case, these are often the same as source producers.

Users who opt-in data, People who operate machines that generate data, Research and Industry partners

### Who are Users in your dataset lifecycle?

Use this to determine which group(s) of product users might need easy descriptions about the data or the dataset, or who might be at risk from inappropriate use of the dataset.

#### TYPICAL

Who are end-users who have a normal or typical experience of classes of products that use the data?

hames, job roles, departments, affiliations, etc.

#### IMPACTED

Who are end-users who have an atypical (positive or negative) experience of classes of products that use the data?



#### CONTRIBUTORS

Who are end-users who produce or opt-in data in the product experience, that is used to update the dataset(s)?



# Producers, agents, & users in the dataset lifecycle relevant to Data Card(s)



#### IMPACTED PRODUCERS





#### CONTRIBUTING USERS



## Who are most likely to fill out your Data Cards?

# PRODUCERS AGENTS A Who, role in creating Data Card 6



## Who are most likely to read your Data Cards?

#### PRODUCERS

AGENTS



#### 5 min

#### USERS



## Summarize: Who are the target readers (agents) of your Data Card?



5 min

# Agent Characteristics: Data Fluency and Domain Expertise



EXPERT

5 min

# Checklist

YOU SHOULD NOW HAVE



- Their role in creating Data Cards ✓
- Their uses for Data Cards

An intuition for downstream needs for dataset documentation

#### #datacardsplaybook



<u>The Data Cards Playbook</u> is an adaptable toolkit of participatory activities, conceptual frameworks, and guidance that support Responsible AI practices for transparency in dataset documentation.

If you've adapted, implemented, or have feedback for this guidance, we'd love to hear from you at <a href="https://github.com/pair-code/datacardsplaybook">https://github.com/pair-code/datacardsplaybook</a> .

Find the complete Playbook at <u>https://pair-code.github.io/datacardsplaybook </u>7





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