DATOPOLIS

The open data board game beta

Instructions

DATOPOLIS

What's in the box?

66 data tiles of six types with a closed side and an open side

12 private data tiles of six types

39 event cards

63 tool cards

9 turn / role cards

Mobile app
A mobile map of local public clinics.

Charity
THIRD SECTOR

Keep the social score up

You win if
at the end of the game, the social score is the highest

1 town dashboard

3 dashboard markers

100 use markers of five colours

instructions

1 bag for the data tiles

You can play two different versions of Datopolis

The **warm-up version** teaches you how to negotiate and build with data
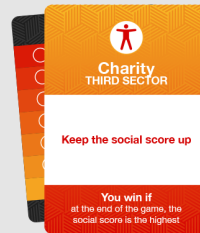(20 – 30 minutes)

The **full version** allows you to take on different player roles in the town of Sheridan, with competing winning conditions. You must work together to respond to environmental, economic and social crises in the town
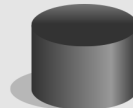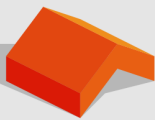(45 minutes – 1 hour)

How Datopolis works

Laying data tiles

There are six data types:

economic

transport

product

social

health

democratic

environmental

geospatial

weather
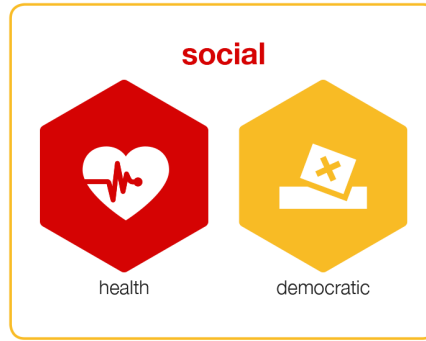
Open, closed or private data

You can lay most data tiles as **open** or **closed** data. Private data tiles can only be laid as closed data, and can never be opened.

open data

closed data
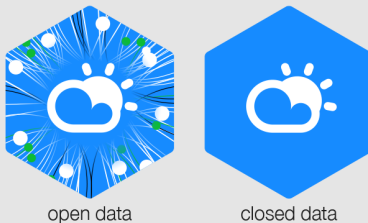
When you lay a data tile for the first time, place a **use marker** on it to show you **own** it. **Every time you lay a tile, you must place a use marker on top of it.**

private data

Creating tools

You can only create tools when the pattern on the **tool card exactly** matches **data** on the table.

You can only use data that you **own** (which has your marker on it) to build tools, unless it is **open**.

You can only lay new **data tiles** from your hand if they are used in a tool you are building. You can try to persuade other players to make their data **open** so you can use it to build your tool.

Mobile app

A mobile map of local public clinics.

Negotiations

During your turn, you can negotiate deals with other players. **Only you can initiate negotiations, but players you negotiate with could bring in another player to make a three-way or four-way deal.** You might exchange data tiles with them. They might open some of their data if you open yours. You might trade tool cards. Anything goes!

BUT only you can put down new data tiles or create tools.

Quick reminder
- **Once you have placed data tiles in the data infrastructure, they can never be moved**
- **You cannot lay data tiles unless you will be using them to build a tool**
- **You can only use closed data already in the data infrastructure if you own it, to build a tool**
- **You can use open data that is owned by other people (because it is open!)**
- **You can flip any closed data tile you own to show its open side at any time in the game**

Warm up game (20–30 minutes)

In this game you will build tools using data tiles that might be 'open' or 'closed' data. The pattern of tiles that emerges is called the 'data infrastructure'. The first player to complete 10 points worth of tools wins.

Correct Five player set up, each player has placed a tile around the open data tile as **closed data**, and placed their **use marker** on their data tile.

Incorrect Five player set up, but one data tile (pink – product data) is not touching the centre open data. All data tiles at setup must touch the open data tile.

Correct Four player set up, one player has placed a **private data tile (black border)**. Only this player will be able to use that data tile for the duration of the game.
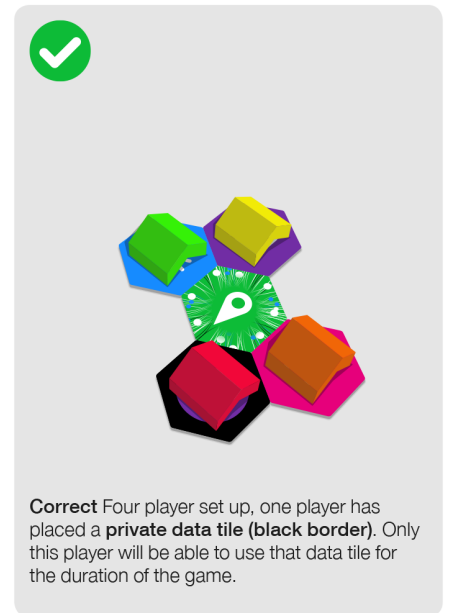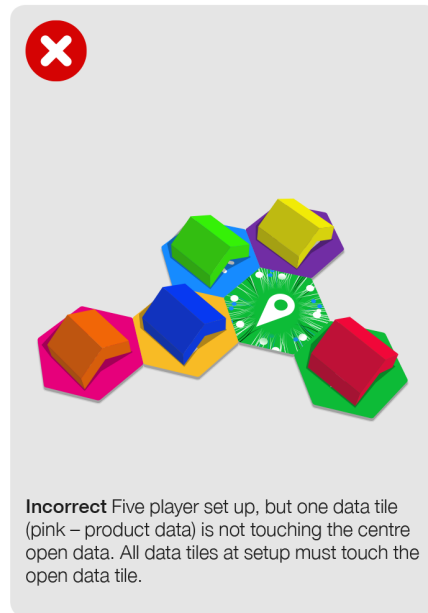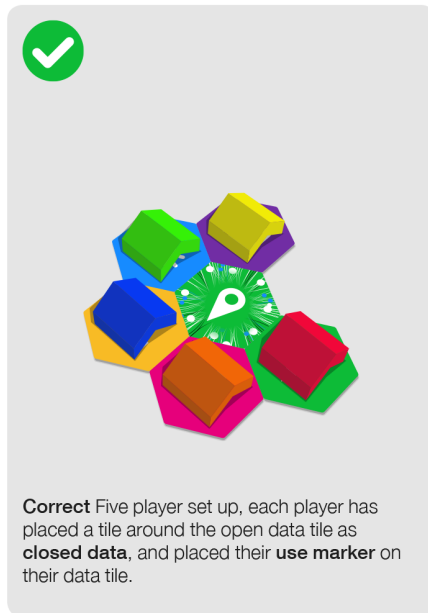
Illustration Data infrastructure set up

Game setup

1. Give each player one set of coloured **use markers**. You need these to indicate data that you own or use, after it has been laid as part of the data infrastructure, otherwise, players won't know who to negotiate with to open up data!
2. Put all the **data tiles** in the bag.
3. Pick out one **data tile**. If it's a **private** data tile, put it back and keep picking until you get a normal data tile. Put the data tile in the middle of the table **open side up**.
4. For each player in turn:
   a. Pick two **data tiles** out of the bag.
   b. Place one of them next to the middle tile, **closed side up**. You can choose which one to place. The other one stays in your hand.
   c. Put one of your **use markers** on the tile you placed.

Getting ready to begin

1. Give each player a **turn card**. In this version of the game, you will not be using the roles on the inverse of the turn card.
2. Shuffle the **tool cards**.
3. Deal three **tool cards** to each player.
4. Place the remaining **tool cards** face down somewhere everyone can reach them.
5. The rest of the components – **event cards and town dashboard** – are not needed in this game.

Rules of play

Choose a player to start. We recommend starting with the player who most recently used some data – otherwise, let the youngest player start.

Use your **turn card** to help you through each stage of your turn:

1. Take a **data tile** from the bag into your hand.
2. Look at the data tiles you have in your hand, your tool cards and data that has already been laid. Negotiate with other players. When you think you can build something:
   a. Place the **tool card** on the table in front of you so everyone can see what you're building.
   b. Place a **use marker** on *every* data tile you used to create the tool – including data tiles that already have markers on them – so everyone can check that the pattern on the card matches the data you're using.
   c. Make up a name for the **tool**, and tell everyone what it is and what it does.

> Players might choose to display their tool cards and data openly.

This player has completed a piece of research using three data tiles – two of which are **open** (and so anyone can build with them), and one **closed data** tile that they own. They have placed one **orange use marker** on every data tile used in their tool.
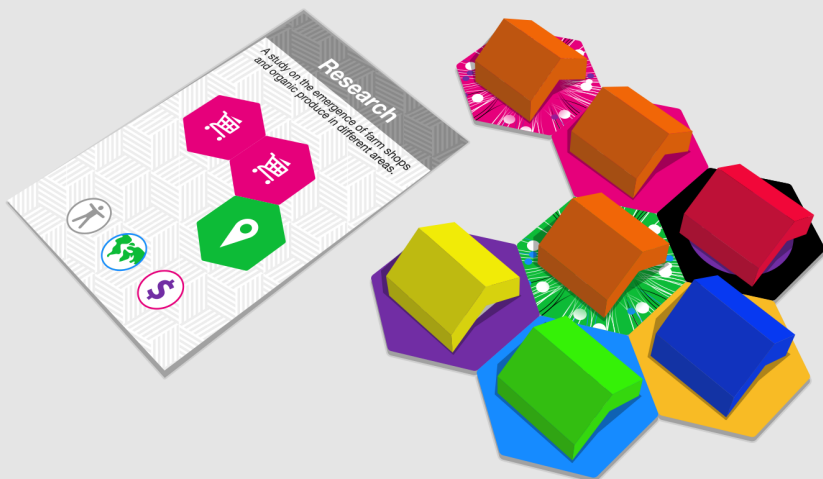
**Illustration** Building a tool

3. You can create more than one tool during your turn, if you're able to. When you're finished, you have the option of discarding **one** of the **tool cards** in your hand.
4. Draw enough new **tool cards** so that you end your turn with **three new cards** in your hand.

Play moves on to the player on the left.

Winning
Each tool is worth the same number of points as the number of data tiles it uses. For example, a tool with three data tiles shown on it is worth three points. You win the game if you're the first player to **create 10 points worth of tools**. The game ends immediately when you get to 10 points.

Illustration By the end of the game, your data infrastructure might look a bit like this
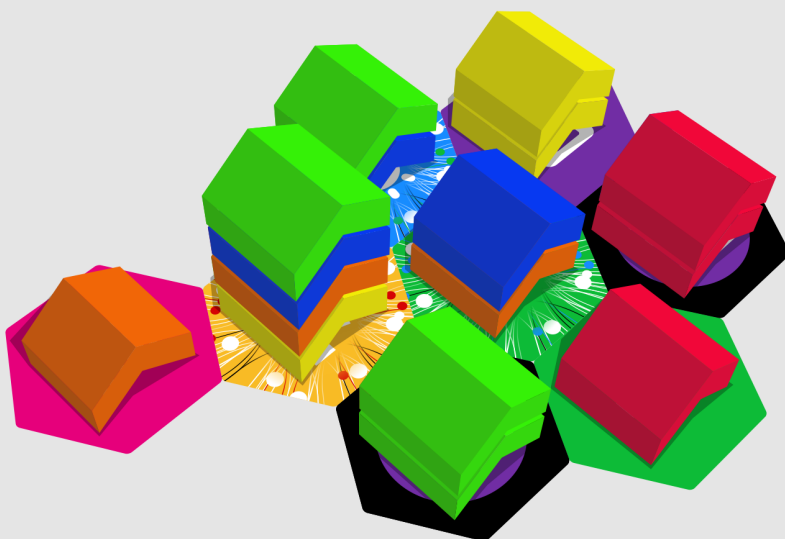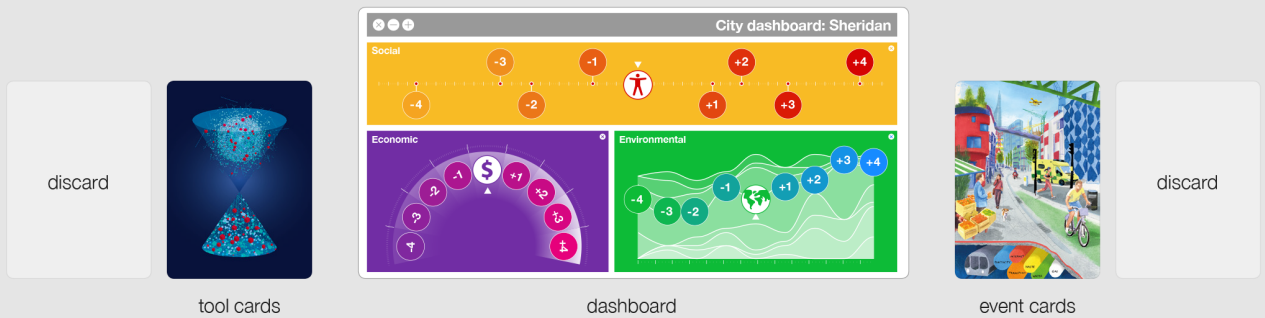
Full game

The full game works in the same way as the **warm-up version**, except each player is working towards a different goal, and the life of the town is declining.

The Dashboard

The **dashboard** keeps track of the life of the town: its people, economy and environment. Every turn, **event cards** may lower the **dashboard** scores, but making **tools** can increase them. Different players have different **roles** and different goals as a result. It's possible for everyone to lose, everyone to win, or for only some players to win.

tool cards

dashboard

event cards

Having an impact

In the full game, when you create a **tool** you have an **impact** on the town. This increases the scores on the **dashboard**. There are three different types of **impact**: economic, social and environmental.

Different **tools** can have different **impact**. You can choose which impact a tool has when you build it. **A tool can only have one impact.**

Example

This **tool** is a mobile app of local public clinics. It uses democratic data (yellow), health data (red) & geospatial data (green).

If you build it, you can choose to *either* increase the **social score** on the dashboard *or* increase the **environmental score**. The social and environmental icons are coloured; the economic icon is grey.
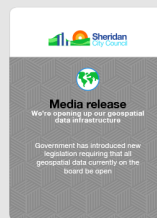

Events

There are three kinds of events in the game.
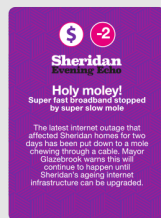
Town events are bad things that happen in the town. They lower the **impact scores** on the dashboard. Discard them after changing the impact score.

Media releases are new rules from government. Only one is in effect at any time. Keep it face up in the middle of the table. Discard old government events when a new one is drawn.
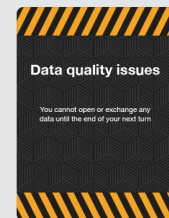
Town crises are things that affect you when you draw them. Some of them last until the end of your next turn, when you draw the next event card.

Roles

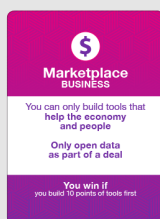There are nine roles in the game. You must not tell anyone what role you have but you can reveal it by what you do and what kinds of deals you make.

Marketplace BUSINESS $	Scientist PUBLIC SECTOR 🌐	Charity THIRD SECTOR 👤
You can only build tools that **help the economy and people**	**Encourage the availability of environmental data**	**Keep the social score up**
Only open data as part of a deal		
You win if you build 10 points of tools first	**You win if** at the end of the game, all the environmental data that can be is open	**You win if** at the end of the game, the social score is the highest

Private-sector roles are trying to build successful businesses. They win if they're first to create 10 points of tools.
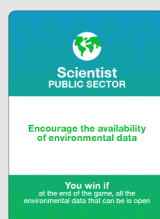
Public-sector roles are trying to build long-term sustainability. They win if there's lots of open data on the board.

Third-sector roles are trying to maximise impact. They win if the **impact score** they care about is highest at the end of the game.

Game setup – just like in the warm-up game!

1. Give each player one set of coloured **use markers**. You need these to indicate data that you own or use, after it has been laid as part of the data infrastructure – otherwise, players won't know who to negotiate with to open up data!
2. Put all the **data tiles** in the bag.
3. Pick out one **data tile**. If it's a **private data tile** put it back and keep picking until you get a normal data tile. Put the data tile in the middle of the table **open side up**.
4. For each player in turn:
   a. Pick two **data tiles** out of the bag.
   b. Place one of them next to the middle tile **closed side up**. You can choose which one to place. The other one stays in your hand.
   c. Put one of your **use markers** on the tile you placed.

For the full version

1. Deal out three **tool cards** to each player.
2. Give each player a **role card** (these are on the other side of the turn card) at random. Do not show anyone your role card.
3. Place the **dashboard** somewhere everyone can reach it but away from the tiles. Put the three **dashboard markers** on the dashboard at level 0.
4. You have six **government media releases** among your event cards. Discard **four** at random, and shuffle the remaining two **media releases** into the event card deck.
5. You have three **town crisis** cards in the event card deck. Ensure they are evenly distributed through the deck.
6. Place the **event cards** in a pile face down near the dashboard.

Rules of play

Choose a player to start. We recommend starting with the player who most recently used some data – otherwise, let the youngest player start.

On a player's turn:

1. Take a **data tile** from the bag into your hand.
2. Create as many **tools** as you want:
   a. Place the **tool card** on the table in front of you.
   b. Make up a name for the **tool**, and tell everyone what it is and what it does.
   c. Place a **use marker** on every **data tile** you used to create the tool.
   d. Choose one of the **impacts** on the **tool card** and move that score up one on the **dashboard**.
3. After creating as many tools as you want, if you want, discard one of your **tool cards**. You can also discard a tool that you have already built, reducing the points you have collected.
4. Draw new **tool cards** so that you end your turn with three in your hand.
5. Take an **event card** and do what it says.

Play moves on to the player on the left.

Winning

There are three ways the full game can end:

1. If any player has created 10 points worth of **tools** the game is over. There will be some winners and some losers. Every player must show their **role card** and say whether they have won or lost. Try not to end the game by creating 10 points of tools if you're not going to win.

2. If *all* the **impact scores** on the dashboard get to +4, the town has become a utopia. **Everyone wins! (We think this is technically impossible)**.

3. If any **impact score** on the **dashboard** is at -4 at the beginning of a player's turn, the town is in a precarious state. This player has *one last chance* to build a tool or tools in an **emergency response** – collaboration with fellow players will be key!

An emergency response

During the emergency response turn, each completed tool will be worth two points. **The emergency response phase can only be used twice in the game.** If any **impact scores** get to -4 a third time, or you don't lift the score from -4 during the emergency response, it's game over! **Everyone loses.**

The warm-up version of Datopolis has been useful for team away days, data workshops and strategy sessions in a range of organisations. The full version is more suited to board game lovers like us who like a bit more complexity.

Photos: Mark Braggins

Why we built Datopolis

We play a lot of board games, and we spend lots of our time talking about data and open data. Datopolis lets us introduce data in a tactile, engaging way.

We created Datopolis in the open, using feedback from playtesting sessions for more than 12 months. The components are available for printing and editing on GitHub and we'll continue to improve it based on your feedback. The majority of Datopolis is openly licensed: you can change the rules, the cards, the tiles, translate it and localise it so long as you attribute the Open Data Institute and Folk Labs. You can even sell your version if you want. The only exception is the cover art for the box and illustrations in the instructions, which cannot be used for commercial purposes.

Acknowledgements
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A very special thank you to Folk Labs, who put in lots of hard work illustrating the game, and without whom it wouldn't look this pretty.

Ellen & Jeni

Feedback
We would love to hear what you think of this game.

Go to **http://datopolis.org** and tell us your thoughts.

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The individual game components instructions text and method are openly licensed (CC-BY) and available at **https://github.com/opendataboardgame/game**