

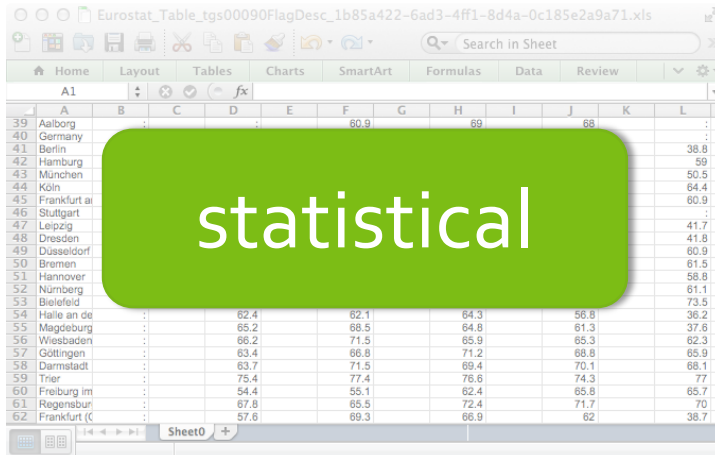
THE WHAT, WHY AND HOW OF OPEN DATA

JENI TENNISON @JENIT
TECHNICAL DIRECTOR JENI@THEODI.ORG



WHAT?

WHERE DO YOU GET "DATA"?



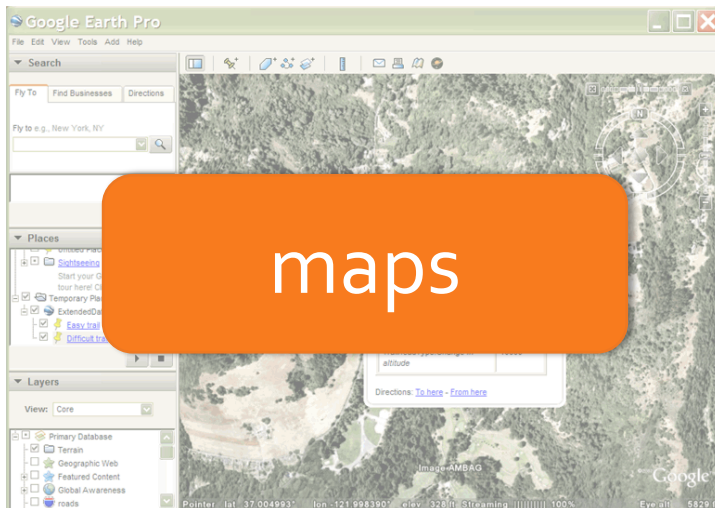
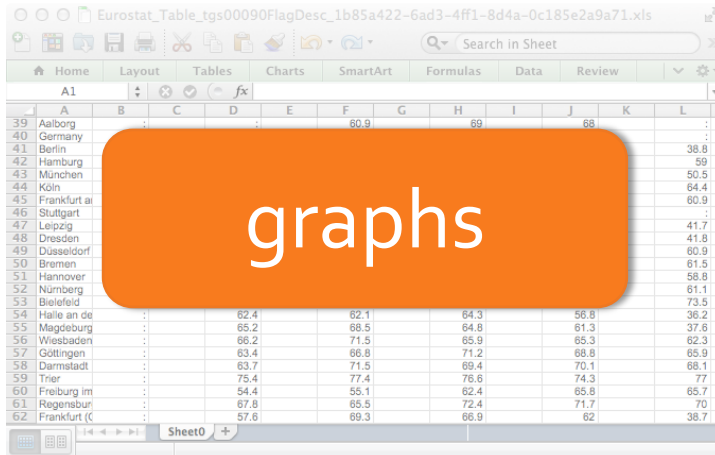
```

- http://odifridayschrisvein.eventbrite.com: {
  @type: http://schema.org/Event,
  startDate: "2013-02-22T13:00:00+00:00",
  endDate: "2013-02-22T13:45:00+00:00",
  - location: {
    @type: http://schema.org/Place,
    name: "Open Data Institute"
  },
  - offers: [
    - {
      @type: http://schema.org/Offer,
      name: "Guent",
      price: 0,
      priceCurrency: "GBP",
      validThrough: "2013-03-01T09:00:00+00:00",
      inventoryLevel: 45,
      validFrom: "2013-02-15T11:00:00+00:00"
    }
  ]
}

```

- 6 Registration of local services. **E+W**
- (1) In this section "service" means a local service which is neither a London local service ^[F1] nor a service which falls within subsection (1A) below ^[F1] nor a service provided under an agreement ^[F2] entered into, where a railway service has been temporarily interrupted, with the Secretary of State, the Scottish Ministers or the National Assembly for Wales under section 40 of the Railways Act 2005 (substitution services provided for interrupted or discontinued railway services) ^[F2].
- ^[F3](1A) A service falls within this subsection if conditions A and B are satisfied in relation to it.
- (1B) Condition A is satisfied if the service is provided in pursuance of—
- (a) the obligation placed on a local education authority by section 508B(1), section 508F(1), section 509(1) or (1A), or Schedule 35C to the Education Act 2002;
- (1C) Condition B is satisfied if the service is provided in pursuance of the provisions of paragraph (a), (b) or (c) of section 508B(1), section 508F(1), section 509(1) or (1A), or Schedule 35C to the Education Act 2002.
- (c) a person involved with the provision of education or training at any such premises.]
- ^{F3}(2) Subject to regulations under this section, no service shall be provided in any traffic area in which there is a stopping place for the service unless—
- (a) the prescribed particulars of the service have been registered with the traffic commissioner for that area by the operator of the service;
- (b) the period of notice in relation to the registration has expired; and
- (c) the service is operated in accordance with the registered particulars.

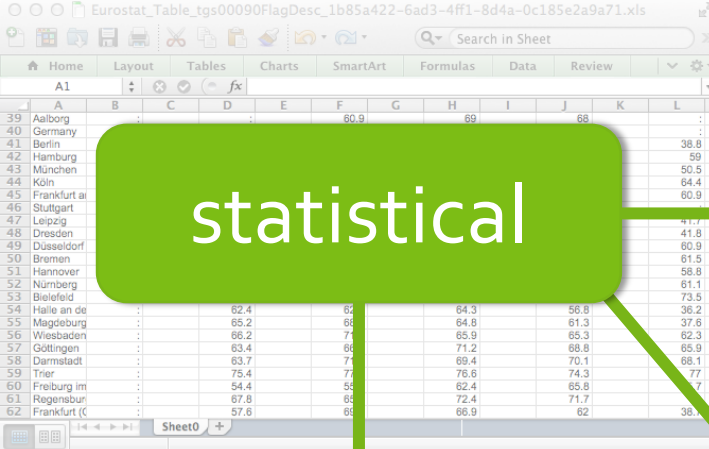
DATA CAN BE REUSED



```
{
  - http://odifridayschrisvein.eventbrite.com: {
    $type: http://schema.org/Event,
    startDate: "2013-02-22T13:00:00+00:00",
    endDate: "2013-02-22T13:45:00+00:00",
    - location: {
      $type: http://schema.org/Place,
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```


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DATA CAN BE COMBINED



statistical

City	Value 1	Value 2	Value 3	Value 4	Value 5
Aalborg					
Germany					
Berlin					
Hamburg					
München					
Köln					
Frankfurt am Main					
Stuttgart					
Leipzig					
Dresden					
Düsseldorf					
Bremen					
Hannover					
Nürnberg					
Bielefeld					
Halle an der Saale					
Magdeburg					
Wiesbaden					
Göttingen					
Darmstadt					
Trier					
Freiburg im Breisgau					
Regensburg					
Frankfurt (Oder)					



structured

```

- http://odifridayschrisvein.eventbrite.com: (
  @type: http://schema.org/Event,
  startDate: "2013-02-22T13:00:00+00:00",
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      price: 0,
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    )
  )
)

```

document

geographic

Registration of local services. **E+W**

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WHAT DOES "OPEN" MEAN?

- **for everyone**
 - not limited by funds
 - not limited by who they are
- **to do anything**
 - analyse and present in different ways
 - combine with other data
 - republish for other people
 - make money

MOST DATA IS NOT OPEN

- You must not use or attempt to use any automated program to access our system or this web site, or to search, display or obtain links to any part of this site. All access to and use of the services via any automated software agent is prohibited. This includes without limitation, any mechanical program, screen scraper, spider or other web crawler.

Landmark's Energy Performance Certificate website

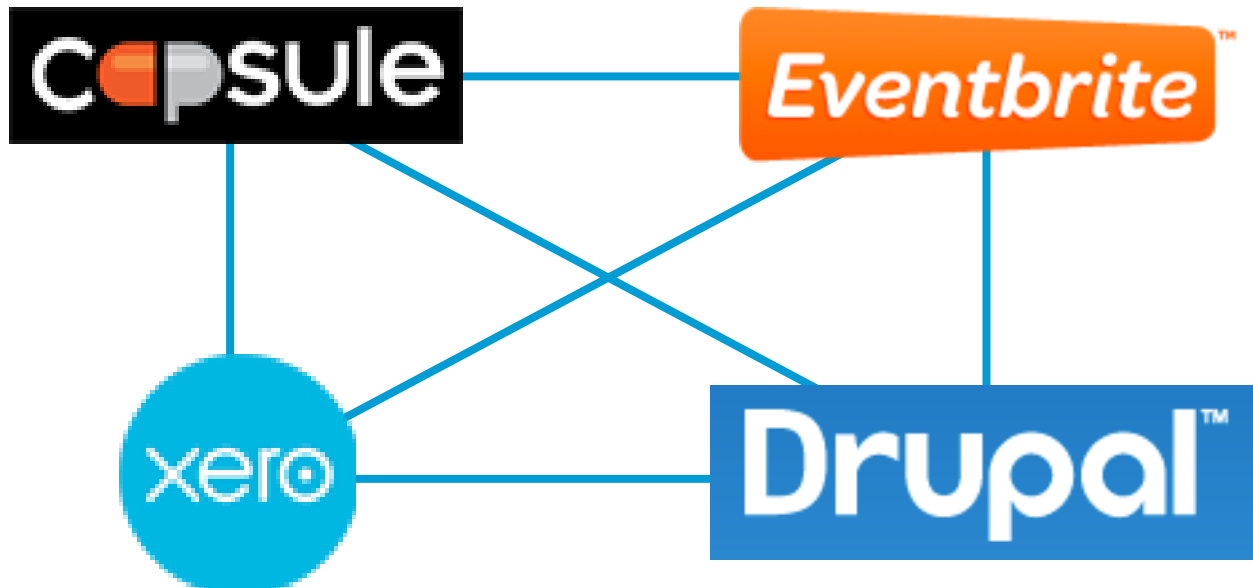
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WHY? (1)

GREAT ONLINE SERVICES

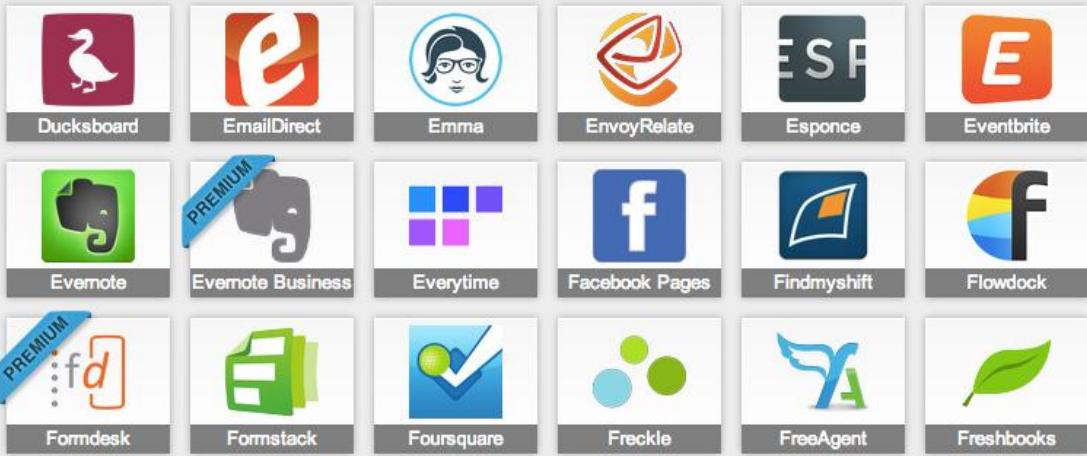


APIS EVERYWHERE

Create your first Zap to push new data from...



Search services by name... or find services by category ▾



Showing 54 of 169

WHY DO THEY HAVE APIS?

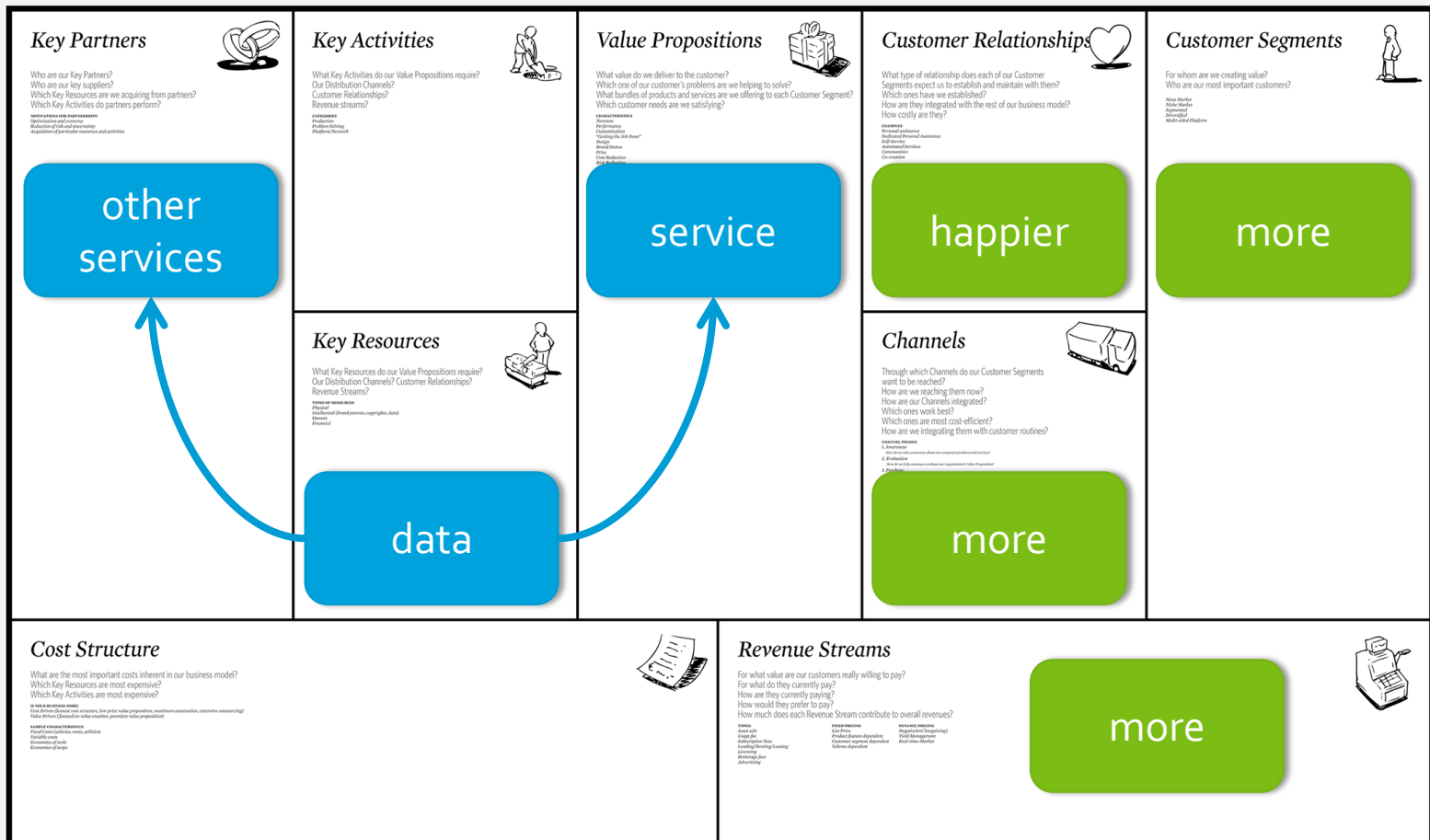
The Business Model Canvas

Designed for:

Designed by:

On: Day Month Year

Iteration: No.



On: Day Month Year
Iteration: No.



WHY? (2)

ENCYCLOPEDIAS



WIKIPEDIA
The Free Encyclopedia



ENCYCLOPÆDIA
Britannica®

CODE



MAPS



OpenStreetMap

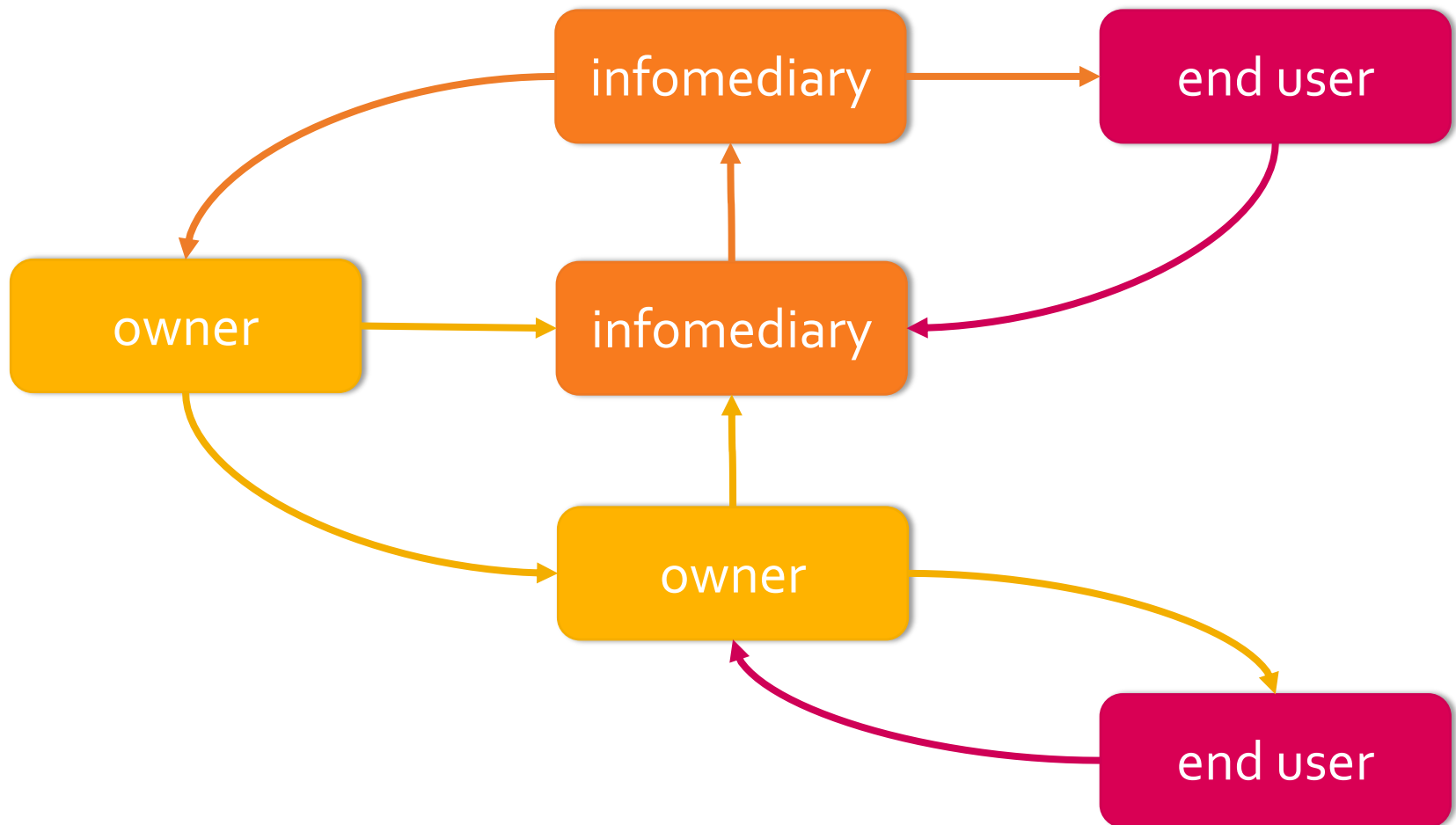


COMMONS-BASED PEER PRODUCTION

"a new model of socio-economic production in which the creative energy of large numbers of people is coordinated (usually with the aid of the Internet) into large, meaningful projects mostly without traditional hierarchical organization"



NETWORKS OF DATA



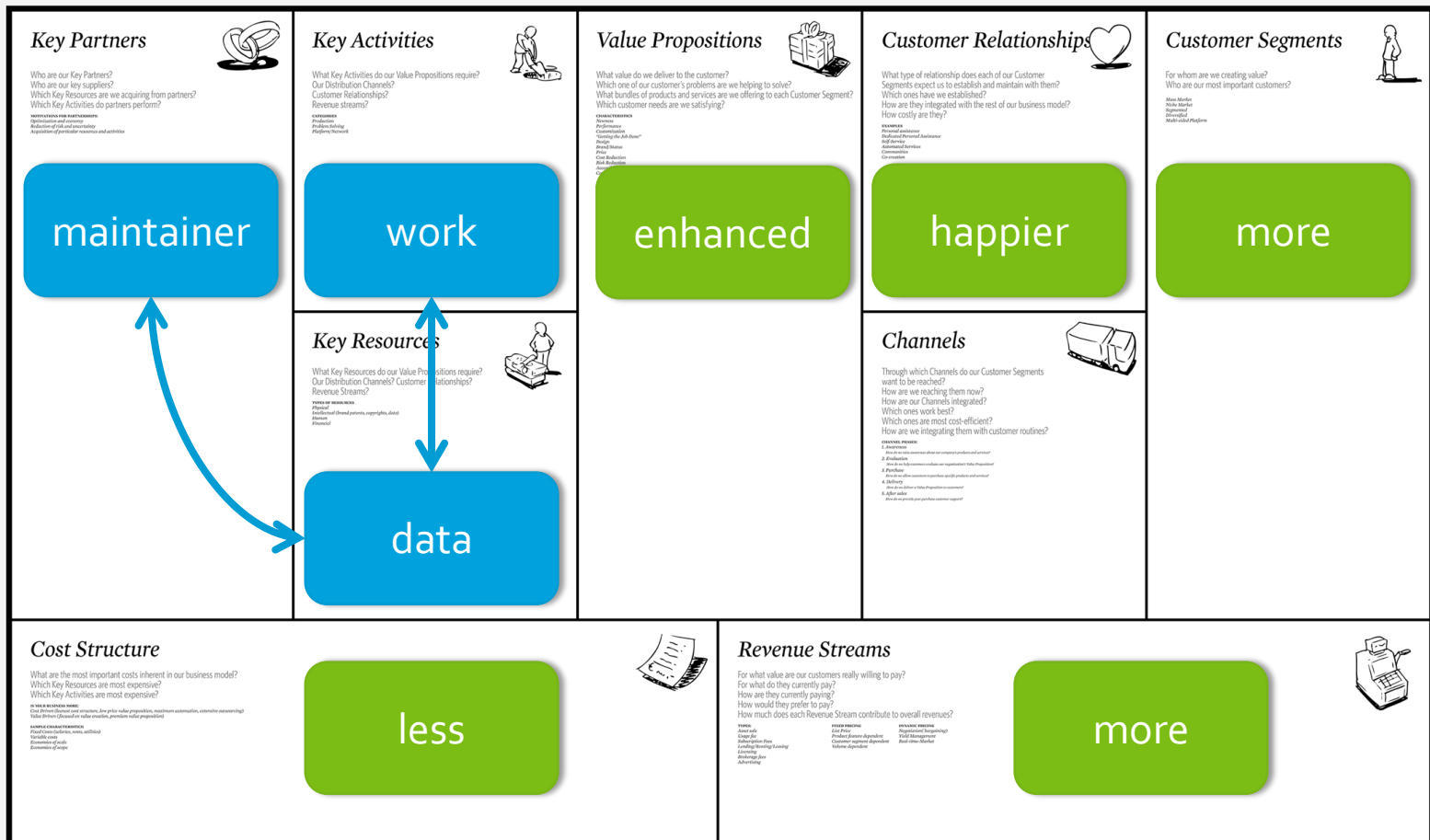
WHY OPEN DATA?

The Business Model Canvas

Designed for:

Designed by:

On: Day Month Year
Iteration: No.



HOW?

1. IDENTIFY THE DATA YOU HAVE

PRIMARY DATA

- **takes effort**
 - collect
 - maintain
- **and investment**
 - people
 - equipment
- **examples**
 - Met Office
 - book publishers
 - census

Key Partners

Who are our Key Partners?
Who are our key suppliers?
Which Key Resources are we acquiring from partners?
Which Key Activities do partners perform?

NOTIFICATIONS FOR PARTNERSHIPS:
Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities



Key Activities

What Key Activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

CATEGORIES:
Production
Problem Solving
Platform/Network



collect

maintain

Key Resources

What Key Resources do our Value Propositions require?
Our Distribution Channels? Customer Relationships?
Revenue Streams?

TYPES OF RESOURCES:
Physical
Intellectual (brand, patents, copyrights, data)
Human
Financial



data

Cost Structure

What are the most important costs inherent in our business model?
Which Key Resources are most expensive?
Which Key Activities are most expensive?

IF YOU BELIEVE MORE:
Cost Drivers (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)
Value Drivers (focused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS:
Fixed Costs (salaries, rent, utilities)
Variable costs
Economies of scale
Economies of scope

people

equipment

EXHAUST DATA

- support activity
- no extra effort
- no extra cost
- examples
 - till receipts
 - phone usage
 - customer data
 - accounts

Key Partners



Who are our Key Partners?
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Which Key Activities do partners perform?

MOTIVATIONS FOR PARTNERSHIPS:
Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities

Key Activities



What Key Activities do our Value Propositions require?
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Problem Solving
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as usual

Key Resources



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BY TYPE OF BUSINESS MODEL:
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SAMPLE CHARACTERISTICS:
Fixed Costs (salaries, rent, utilities)
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Economies of scale
Economies of scope

as usual

DO YOU OWN IT?

created data

you own the data you gather

derived data

you might own data you
calculate from others' data

bought data

you almost certainly
don't own data you've got
from someone else

IS IT PERSONAL?

non-personal

data that has nothing to do with people or groups of people

aggregate

summaries of data about people or groups & their activity

personal

data about people or groups & their activity

2. WORK OUT WHAT YOU WANT TO ACHIEVE

OPEN DATA IS A TOOL

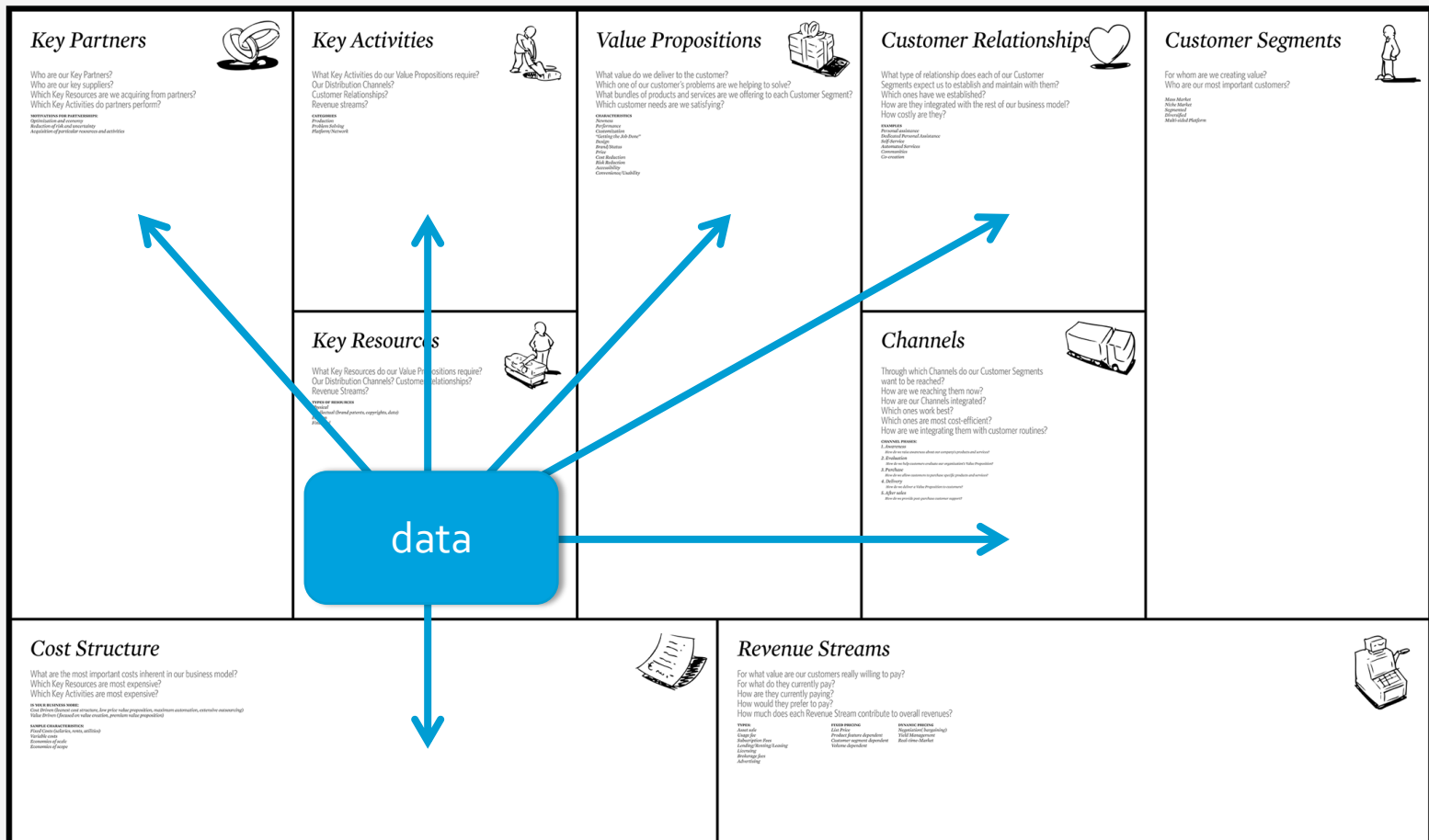
The Business Model Canvas

Designed for:

Designed by:



On: Day Month Year

Iteration: No.



3. MAKE IT OPEN

CHOOSE A LICENCE

	attribution	attribution & share-alike
content		
data	ODC-by	ODC-ODbL

ADD THE LICENCE

in HTML

```
<a resource="{{database-url}}"
    rel="license"
    href="{{licence-url}}">
    {{licence-name}}
</a>
```

in HTTP

```
Link: <{{licence-url}}>; rel=license
```

4. ITERATE & IMPROVE

TECHNICALLY

- **standard formats**
- **APIs help some reusers**
- **dumps help other reusers**
 - whole dataset analyses
 - also provide feeds of changes
- **links & link relations**
 - pull together disparate sources

HIGH QUALITY OPEN DATA

- **make it trustworthy**
 - accurate, timely
 - guaranteed availability
- **create a community**
 - feedback, including APIs
 - discussion lists
 - code libraries

CHALLENGES

WE DON'T KNOW YET

- **which business models work**
- **which licences drive good behaviour**
- **how to measure open data use**
- **how to make data findable**
- **whether data formats really matter**
- **whether links in data really matter**
- **whether the world is better in the end**



Open Data Institute

@JENIT

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QUESTIONS?