

**open
data
institute**



Open Data & Business



Today

A bit of disruptive history

Trends affecting data and business

What role can open data play in business?

Recognising (open data) opportunities

Time with ODI start-ups –

Maker day briefing



Flickr: _fxr/2359186938



Slides by Kathryn Corrick based on work by Tom Wainwright

Brief history lesson



[cooking magazines](#) / [magazines](#) / [meredith](#)

Popular cooking site

Allrecipes.com is getting a print magazine this fall

by [Laura Hazard Owen](#) JUL. 15, 2013 - 9:16 AM EDT

 [2 Comments](#)     

A▼ A▲

SUMMARY: The 16-year-old cooking website Allrecipes.com, which was acquired by Meredith last year, is getting a bimonthly print magazine this fall.

 [tweet this](#)



In reverse

<http://paidcontent.org/2013/07/15/popular-cooking-site-allrecipes-com-is-getting-a-print-magazine-this-fall/>

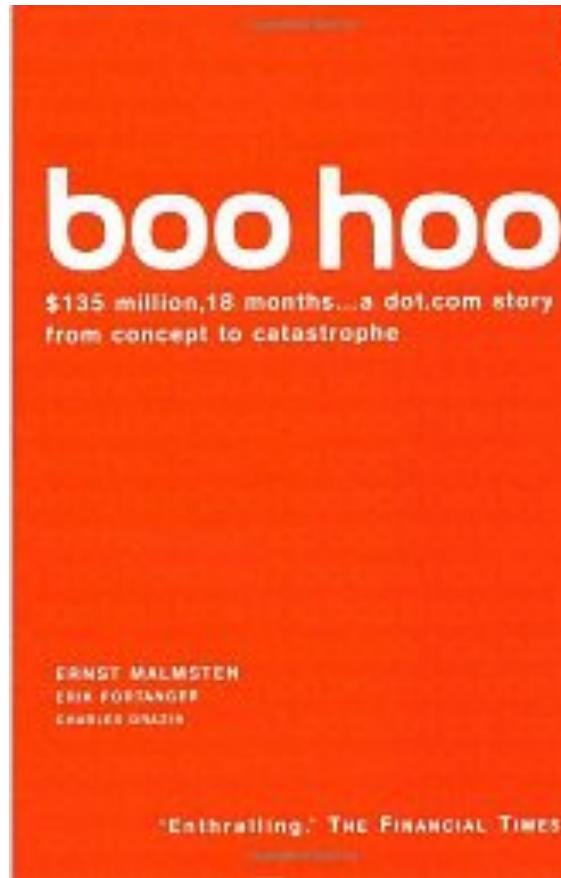
Exercise

In your teams identify the age, business model and which industries they threaten(ed) of the following:

- Google
- Spotify
- Amazon
- Skype



Before we get too excited....



<http://www.amazon.com/books/dp/0099418371>



Slides by Kathryn Corrick based on work by Tom Wainwright

Trends

Data, data everywhere



Slides by Kathryn Corrick based on work by Tom Wainwright

Historical movement

**From a web of content to a
‘web of data’**



Slides by Kathryn Corrick based on work by Tom Wainwright

Commoditisation of data

The cost of working with data has lowered and is continuing to fall

Amazon web services

Sign Up My Account / Console ▾ English ▾

AWS Products & Solutions ▾ AWS Product Information ▾ Developers ▾ Support ▾

Amazon S3

- Amazon S3 Overview
- FAQs
- Pricing
- Amazon S3 SLA

Developer Resources

- Getting Started Guide
- AWS Management Console
- Documentation
- Release Notes
- Sample Code & Libraries
- Developer Tools
- Articles & Tutorials
- Community Forum

Amazon Simple Storage Service (Amazon S3)

Amazon S3 is storage for the Internet. It is designed to make web-scale computing easier for developers.

Amazon S3 provides a simple web services interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the web. It gives any developer access to the same highly scalable, reliable, secure, fast, inexpensive infrastructure that Amazon uses to run its own global network of web sites. The service aims to maximize benefits of scale and to pass those benefits on to developers.

Get Started with AWS for Free

Create Free Account »

AWS Free Tier includes 5GB storage, 20,000 Get Requests, and 2,000 Put Requests with Amazon S3.

View AWS Free Tier Details »

This page contains the following categories of information. Click to jump down:

- Amazon S3 Functionality
- Protecting Your Data
- Managing Your Data
- Pricing
- Getting Started with Amazon S3
- Transferring Large Amounts of Data
- Common Use Cases
- Resources
- Amazon S3 Design Requirements
- Intended Use



Tools are getting easier to use – without the need for coding skills

The screenshot shows the Import.io homepage. At the top is a dark navigation bar with the 'import io' logo, a 'DEVELOPER PREVIEW' badge, and links for Explore, Team, How it works, Pricing, Blog, Log in, Connector Search, and a search icon. Below the bar is a large white section with the heading 'Use data from the Web.' in a large serif font. To the left, there's a slide-in panel with the title 'Stay connected' and a sub-section 'Extract data from a website and keep it live.' It also contains a descriptive paragraph about how Import.io identifies data on websites. To the right of this panel is a large graphic of a black pipe with a red drop falling from its end, set against a grid background. At the bottom of the page, there are two columns of icons and text. The left column includes icons for a computer monitor, a person, a speech bubble, and a gear. The right column includes icons for a person, a speech bubble, a gear, and a heart. Below these are two rows of text: 'Websites are full of useful data.' and 'Today, you extract data by writing code.'; 'Extracting that data is difficult.' and 'We provide tools to make extraction simple.'; and 'Your web browser doesn't help.' and 'We're in Developer Preview. We love feedback.' To the right of this text area is a pink button with a pencil icon and the text 'Extract data yourself'.

import io DEVELOPER PREVIEW

Explore Team How it works Pricing Blog Log in Connector Search

Use data from the Web.

Stay connected

Extract data from a website and keep it live.

Import.io allows you to identify data on a website and create a live connection to it.

Websites are full of useful data. Today, you extract data by writing code.

Extracting that data is difficult. We provide tools to make extraction simple.

Your web browser doesn't help. We're in Developer Preview. We love feedback.

Extract data yourself

<http://import.io/>

Note:

Increasing use of cloud based and browser based software tools for data manipulation and visualisation. Requires modern browsers to utilise.



Access to the web increasing - per capita and in ease of use

- Ability to get information and data quickly and easily
- Increasing use of mobile devices to access the web
- Responsive design enabling better user experience on mobile devices
- New devices – cheaper and smarter

<http://www.google.com/glass/start/how-it-feels/>

Pervasive data collection



Back to latest news

The "Internet of things" will be trialled at London City Airport

26/09/2013

London City are pleased to announce that the Technology Strategy Board will help support LCY with investment of the "Internet of things" (IoT) - demonstrator. The TSB have only funded a small number of organisations with their demonstrator project which we are elated to be in!

The IoT is a concept of connecting machines and objects together through networks to help monitor, control and manage environments. London City will take the concept to the next level to develop an interconnected sensor network and data hub to track, understand and better manage passenger flow and behaviour, bringing the ability to interact with passengers at key touch points across the airport.

Key features will include management of passenger movement through the airport, journey time measurement, customer loyalty programmes and location specific services such as personalised planners and gate reminders for passengers, food pre-ordering, locating missing passengers, baggage tracking, airport asset tracking and the ability to locate people in emergency situations. The project utilises Living Planet Urban Operating System technology and is being led by a consortium of organisations including Milligan, IBM, Cisco Systems and a number of SME technology businesses.

The project is due to be completed in March 2014.

For more information on the Technology Strategy Board visit www.innovateuk.org.

The LCY Blog

Enter the discussion on all things to do with London City Airport

[Read more](#)

LCY Tweets

Dusseldorf services return from London City Airport from 1 September 2013. Find out more <http://bit.ly/1x65aM0LL>

Check out our latest video on how to best spend your time Edinburgh <http://bit.ly/1zBqRjG0G>

Fly to Edinburgh from £150 return. Book flights by clicking here <http://bit.ly/2PwPFoxAYQm>

@theballaround Thank you for getting back to us Stuart - we have informed our terminal management team.

Sensors and Internet of Things
Mobile technologies
Shopping and behaviour monitoring



Quantifying of personal data



TRACK YOUR DAY

The Nike+ FuelBand uses a sports-tested accelerometer to measure your movement in NikeFuel, a universal metric of activity.



SET A GOAL

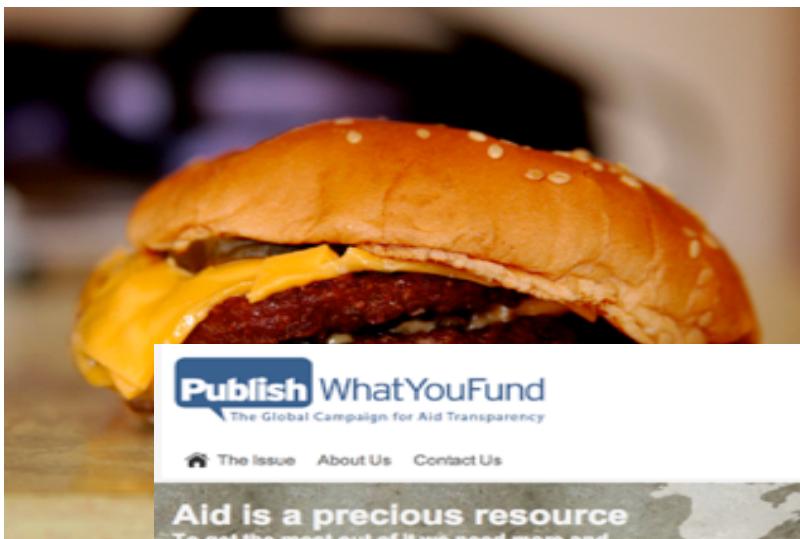
Decide how active you want to be by setting a daily NikeFuel goal. Then, get moving and see your progress along the way.



CONNECT AND GO

Sync with the Nike+ FuelBand app and see your activity history, stay motivated, and connect with your friends.

Demands for greater transparency



Publish What You Fund
The Global Campaign for Aid Transparency

The Issue About Us Contact Us

Aid is a precious resource
To get the most out of it we need more and better aid information. Working with organisations from around the world, we call on donors to publish what they fund.

See how we're doing

MAKE AID TRANSPARENT

How do you rank?
Aid Transparency Index 2012

72 donors in 2012 - Browse Aid Transparency Index

Major Donors Latest News

Publish To IATI Standard

IATI
INTERNATIONAL AID TRANSPARENCY INITIATIVE

Towards Climate Finance Transparency

View study on aid transparency & climate

Latest Tweets



WHERE DOES MY MONEY GO?
Showing you where your taxes get spent

The Daily Bread Country & Regional Analysis Departmental Spending About

How is your tax money spent?

The Daily Bread

See how your daily taxes are divided between the different parts of government.

£3.99 £1.46 £8.40

How much is spent on the various functions of government in total — and where?

Country Regional Analysis

OpenSpending

<http://www.flickr.com/photos/kcorrick/7609944890/> <http://www.flickr.com/photos/brostad/5841297115>

BUSINESS

The Washington Post
with Bloomberg

In the News NSA Trayvon Martin 'Baby Veronica' Rolling Stone U.K. gay marriage law

AD

Experian® Credit Check

www.experian.co.uk

Get Your Credit Score Absolutely Free! Unlimited Access A

Correction: An earlier version of this story stated that lawmakers were proposing a winding down of Ginnie Mae. This is not the case. This version of the story has been corrected.

Freddie Mac hopes to increase transparency with releases of raw mortgage data

By Abha Bhattacharai, Published: June 9 [E-mail the writer ↗](#)

Five years after the national housing bust, Freddie Mac — the McLean-based entity that backs one-quarter of the country's mortgages — is hoping to become more transparent by standardizing its processes and making raw data more easily accessible to the public.

"The more data we have — on the borrower, the property and the loan — the less likely we are to have a blow up like we had in 2008," said Rob Lux, chief information officer of Freddie Mac.

http://www.washingtonpost.com/business/on-it/freddie-mac-hopes-to-increase-transparency-with-releases-of-raw-mortgage-data/2013/06/09/f02c66ce-cd60-11e2-8f6b-67f40e176f03_story.html



Discussion: impact?

In your teams discuss the potential impact for each of these trends for businesses?

- Access to the web
- Commoditisation of data
- Pervasive data collection
- Quantifying of personal data
- Demand for greater transparency



What role does data play in business?



Slides by Kathryn Corrick based on work by Tom Wainwright

Revenue streams

Asset sales

Usage fee

Freemium

Licensing

Subscription fees

Consultancy services

Direct advertisements

Donations (social enterprises)

The Business Model Canvas

Designed for:

Designed by:

Date: _____
Iteration: _____

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?

Key Activities



What key activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

Value Propositions



What value do we deliver to the customer?
Which one of our customer's problems are we helping to solve?
What bundles of products and services are we offering to each Customer Segment?
Which customer needs are we satisfying?

Customer Relationships



What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
Which ones have we established?
How are they integrated with the rest of our business model?
How costly are they?

Customer Segments



For whom are we creating value?
Who are our most important customers?

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?

Key Resources



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

Channels



Through which Channels do our Customer Segments want to be reached?
How are we reaching them now?
How are our Channels integrated?
Which ones need fixing?
Which ones are most cost efficient?
How are we integrating them with customer relations?

Revenue Streams



For what value are our customers really willing to pay?
For what do they currently pay?
How are they currently paying?
How would they prefer to pay?
How much does each Revenue Stream contribute to overall revenue?

Exercise

In your teams pick one of the following (or a separate) businesses and reassess their business model using the business model canvas:

- Google
- Spotify
- Amazon
- Skype



Value proposition

Open data is **free** - value no-longer comes from data itself, but products and services – **added value** developed for the market

How do **YOU** add value?

- Newness
- Performance
- Customization
- “Getting the job done”
- Design

- Price
- Client cost reduction
- Risk reduction
- Accessibility
- Brand



Slides by Kathryn Corrick based on work by Tom Wainwright

Story time



Slides by Kathryn Corrick based on work by Tom Wainwright

Discussion

**How do you use the internet in
your line of work?**



Slides by Kathryn Corrick based on work by Tom Wainwright

(Resilient) Open business models

Low barriers to entry and NO barriers to access – need to develop a unique and inimitable model

How do **YOU** protect your business and product?

IP rights

Complex processes

Human expertise

Bundled services

Continual innovation

Branding

Niche sectors

Client support



Slides by Kathryn Corrick based on work by Tom Wainwright

Exercise: opportunities analysis



Slides by Kathryn Corrick based on work by Tom Wainwright

Further reading

<http://www.theodi.org/guide/how-make-business-case-open-data>



Slides by Kathryn Corrick based on work by Tom Wainwright

Start ups panel



Slides by Kathryn Corrick based on work by Tom Wainwright

Appendix



Slides by Kathryn Corrick based on work by Tom Wainwright

Benefits

Recycle: Much government, industry and NGO data remains abundant, yet **redundant** – social costs

Economy: Expensive to collect data – collection, processing

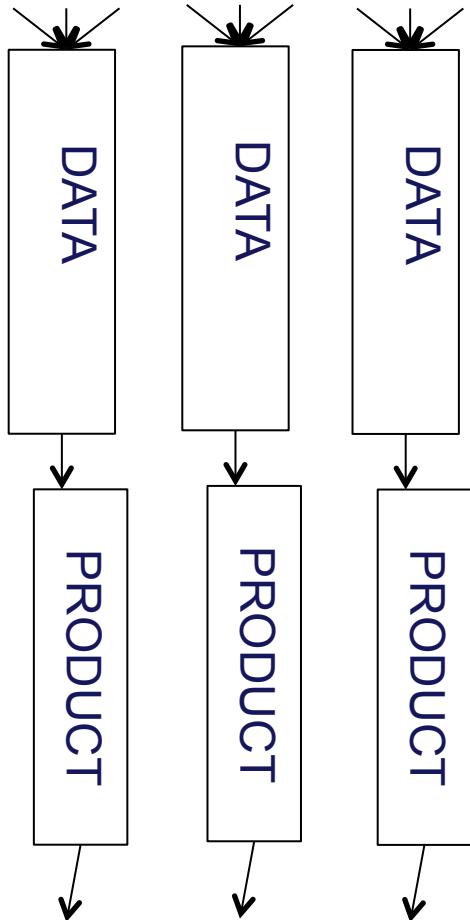
Innovation: Open data can be used to create new products and services and **value** – monetary, **efficiency**, transparency

Outside innovation: **Others** can add value to your data

Efficiency: Data accuracy can be **checked** and **scrutinised**

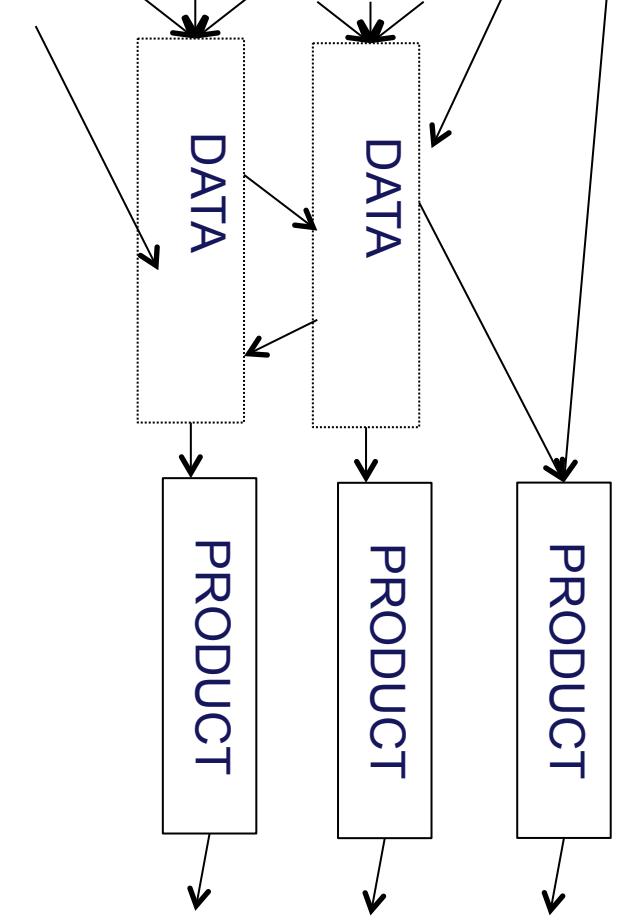


MY DATA!



OUR DATA!

Shift in value chain:
Data as value -> value **from**
data



CLOSED BOXES TO OPEN ECOLOGIES



Closed boxes to open ecologies

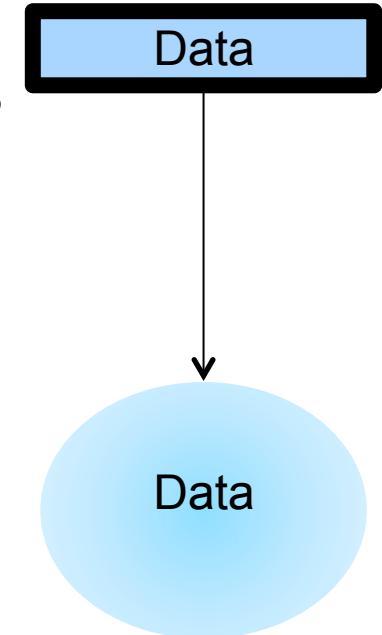
Move towards **openness** in data: data, OSS, innovation

Sharing of **data** and **expertise** to develop new opportunities

Enhanced **sharing** of data, ideas and collaboration

Data is moving from a **private** to a **public** good

Open Data movement is creating a new innovative **ecology**



Further open data examples



Slides by Kathryn Corrick based on work by Tom Wainwright



Login

[HOME](#) [API PROFILES](#) [DEVELOPERS](#) [APPLICATION GALLERY](#) [BLOG](#) [FORUM](#) [CONTACT](#) [SOLUTIONS](#)

The BBYOpen team is currently hiring for some newly created roles on our team. If you are interested in joining a start-up team within a well established company like Best Buy, take a look at the jobs, and submit your resume. Check out our Jobs posting on the lower right corner of the home page. Thanks.

X

BBYOPEN = FUTURE READY RETAIL

Open Development - We are a group of developers, technologists, geeks and idea people who have been thinking about how access to data is changing the future of retail.



What is Open? A simple description of APIs.

A DECK OF CARDS CAN BE MORE THAN A GAME

SEE VIDEO

Explore Our Different API's

See how OPEN data puts customers in control. We create connections for all devices, platforms, channels, technologies and third parties; those that exist now and those that will exist in the future. We are not limited by technology; we are inspired by it.

Developers Start Building

See the various API's that we are working on and that enable things like; real-time access to customer questions/answers, product specs, reviews, ratings, hyper-relevant offers and more.

Inside Open (Coming Soon)

We are makers at heart. Come back soon to check out the things that we are tinkering with these days.

Example



by Kathryn Corrick based on work by Tom Wainwright

Open data on stock availability, location, pricing

User reviews on products

Mobile phone upgrade data

'Freemium' data

Use of open data to facilitate new markets

Open data to provide transparency to students – potentially universities

New decision-making technologies

Hybrid business model

Subscription revenue

The screenshot shows the homepage of the Which? website. At the top right, there are links for 'About Which?', 'Careers', 'Contact us', and 'Help'. A yellow diagonal bar on the right side contains the word 'Example'. The main navigation menu includes 'Technology', 'Home & garden', 'Cars', 'Money', 'Baby & child', and 'Energy'. Below the menu, there are links for 'News', 'Videos', 'Podcasts', and 'About Which?'. A prominent banner features the text 'New tax year for you? Tax thresholds and allowances change today' with two blue links: 'Personal allowance increase among tax changes' and 'Our expert guide on tax rates and allowances'. To the right of the banner is a close-up image of a hand using a calculator. Below the banner are several article cards: one for 'Which? Review Latest tablet reviews' featuring a woman using a tablet; another for 'Which? member trial Sign up for £1' featuring a couple looking at a laptop; a 'Which? campaign Help change bank culture' card with a logo for 'BIG CHANGE' and a stack of binders; and a 'Which? Legal Service Our lawyers advise you' card with a stack of binders. On the far right, a sidebar titled 'Most popular' lists various categories with blue links: Tablets, LED, LCD and plasma TVs, Laptops, Digital cameras, Washing machines, Vacuum cleaners, Printers, Dishwashers, Sat navs, Child car seats, and Which? Local.



Benefits: needn't be about revenue

Transparency: supply chains, energy usage, salaries, operations data

Example

Tate Modern

[home](#) [about](#) [blog](#) [feedback](#) [login](#)

[CARB CULTURE](#)

About this building

Tate Modern is the home of Tate's collection of international modern and contemporary art. Formerly Bankside Power Station, designed by Sir Giles Gilbert Scott and built in two phases between 1947 and 1963, Tate's transformation of the Power Station began in 1995. A steel framework was built within the existing walls of the Power Station to create the seven gallery floors. This framework also supports the existing brick façade of the building. The architects were Herzog & De Meuron. Since it opened in May 2000, more than 40 million people have visited Tate Modern.

Our energy use


Tate Modern

This graph allows everyone to access a range of data from Tate Modern. It's generated daily from data collected every half hour from the on-site meters.

For the week commencing midnight on 11 Mar, Tate Modern has used:

277,436 kWh	£22,139	145,548kg
Energy use Average 1.651kWh per hour	Energy cost Average £131 per hour	Carbon impact Average 866kg per hour





Slides by Kathryn Corrick based on work by Tom Wainwright

Open Business Models for an open world



Open business models

Questionable emergence of **dominant** models

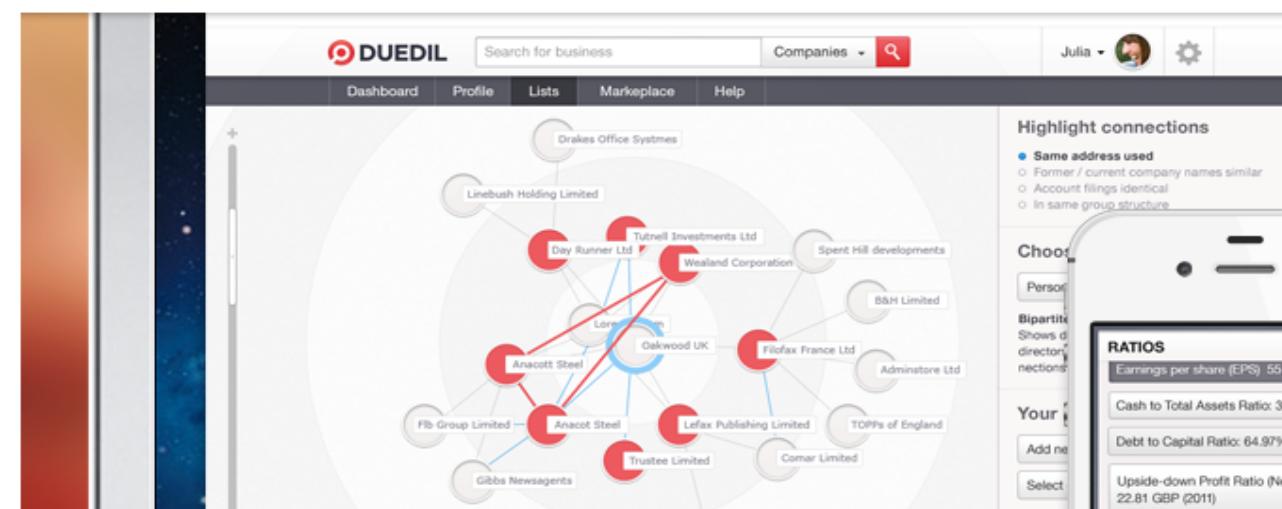
Hybrid models

Closed ← → Open

Models dependent on **resources** and **relationships**

Dynamic markets and competition will create **unique models**

The Duedil API



Welcome to the Duedil Developer Portal.

[Interactive Console](#)[Documentation](#)

This is our first step to opening up the data held by duedil.com to the wider developer community, and we are excited to see what integrations and innovations you create.



Slides by Kathryn Corrick based on work by Tom Wainwright

'Open tier'

Enhance **transparency** of business information

Use of further data with **APIs**

Freemium!

Shift to openness

Model Considerations

Core strategy



Open networks

Customers

Strategic resources

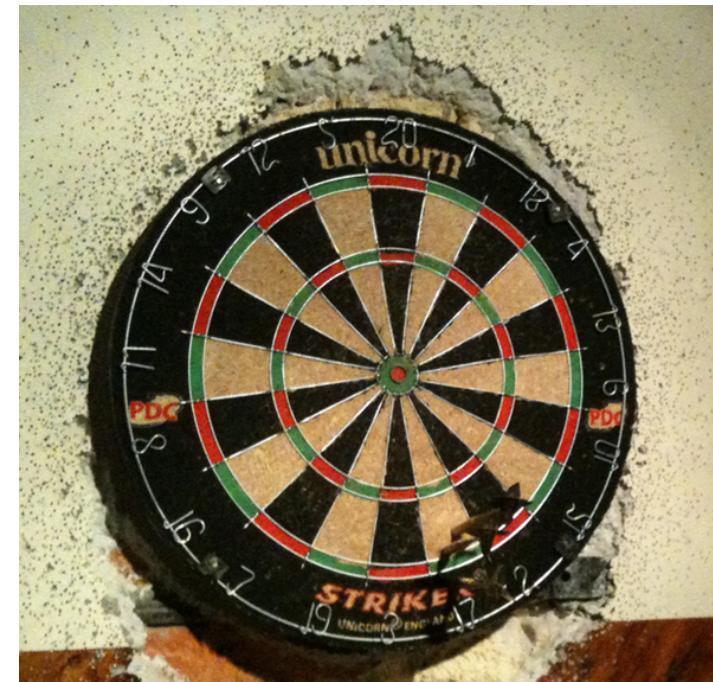
Core Strategy

'Mission', market scope, basis for **differentiation**

What are you going to do?

Which market **sectors** and **segments** are you targeting?

Cost leadership or differentiation?
Is cost leadership less appropriate for OD?



Strategic resources

Core competencies:

Skills and relationships **unique** and **valuable** to customers. **Inimitable** and **transferable** to new **opportunities**

Strategic assets:

Rare and valuable IP, knowledge, brands, code, service process – used to create a **competitive advantage**

Why focus on something you are not good at? Build competitive advantage on key competencies and assets!



Slides by Kathryn Corrick based on work by Tom Wainwright

Open networks and ecologies

Partners: Other companies, competitors, suppliers of data, code, open source software

Open data community: Other businesses, ODI, IP lawyers, firms you could be acquired by (exit), IP buyers to sell licensed products; collaborative partners

Your customers: Identify client needs (and their end users) in detail

Open data suppliers: How can they make data easier to use



Slides by Kathryn Corrick based on work by Tom Wainwright

Customer networks

Who is the target market?

Individuals or businesses sectors,
multiple markets, standard or bespoke

How do they affect the **revenue** streams?
How do you **cultivate relationships**?

Short or long tail?

Off to market! (national or international)

License, sell direct, partner with other firms
Online, telephone, F2F - resources needed

