

# **Bridging the gap between business and technology**

Behaviour Driven Development with Drupal

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**Behaviour Driven Development is not about testing**

**At least, BDD should not be **only** about testing**

# How BDD works?

**Write scenarios that describe behaviours**



**Execute the scenarios against your application**

# How BDD works?

**Write each step of your scenario in plain English**



**Write each step definition in PHP**

# **NHS - National Health Service**

**Project started in 2002**

**Project terminated in 2010**

**Cost: €14 400 000 000 (billion)**

**Cost: 15.4 billion USD**

# **NHS - National Health Service**

**€14.4bn would pay a salary of:**

**60000 nurses for 10 years in the UK**

**240000 nurses for 10 years in Poland**

# **NHS - National Health Service**

**Result: IT system was not FIT for the NHS**

# Why projects fail?

3. Unrealistic deadlines

2. Insufficient resource planning

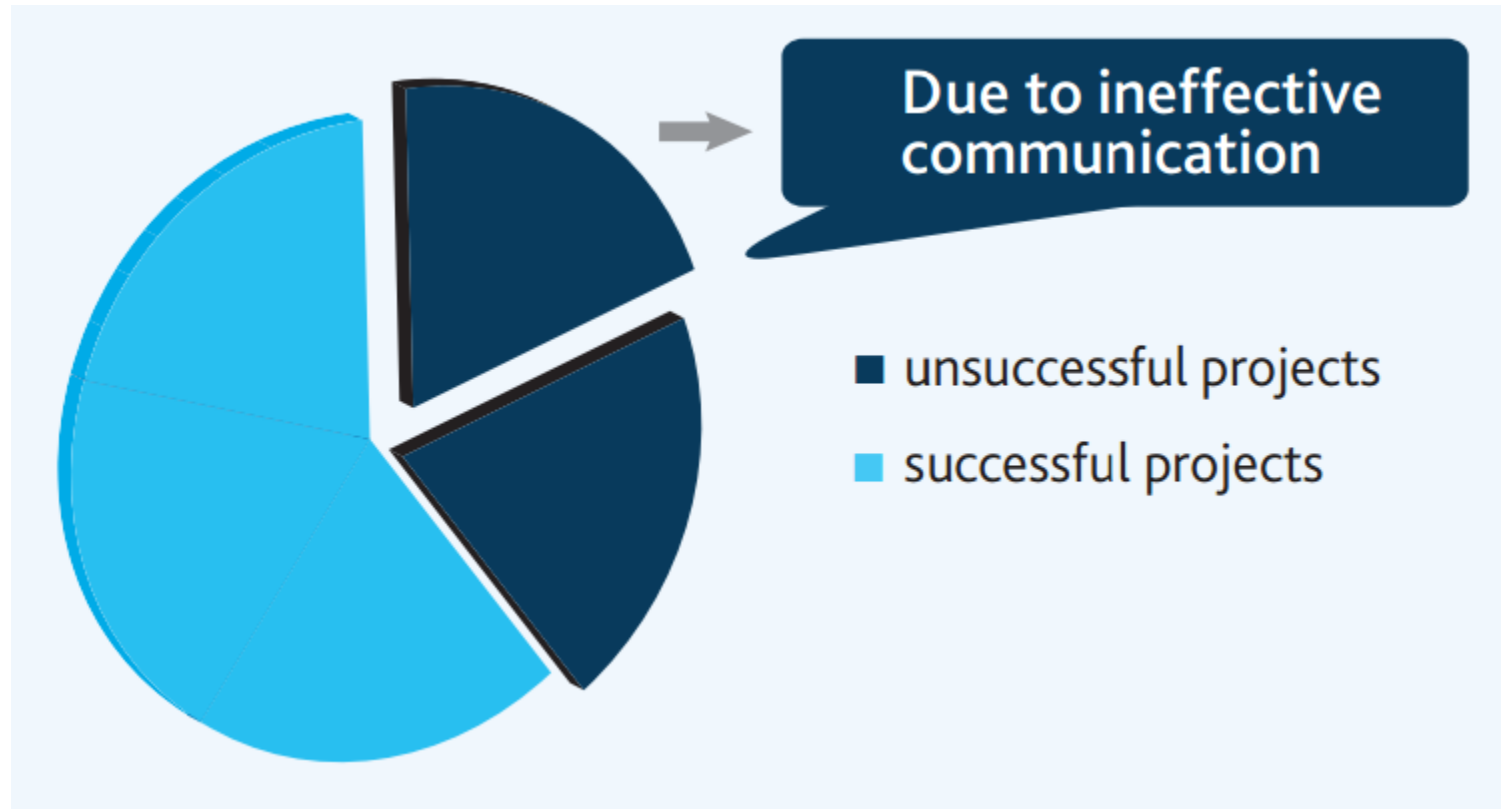
1. Poor communication

Source: Computing Technology Industry Association, 2007

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# Why projects fail?



Source: Project Management Institute, 2013

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# Why communication is important?

As developers we deliver **business value**

Business value is **what really matters to the business**

We find out what really matters to the business through

**Effective communication!**

# Why communication is difficult?

When two people communicate

**Misunderstandings!**

# Why communication is difficult?

**When technical and business people communicate...**

**...they speak different “languages”**

**Even more misunderstandings!**

# Why communication is difficult?

**When people work on a large project...**

**...no one fully understands the project**

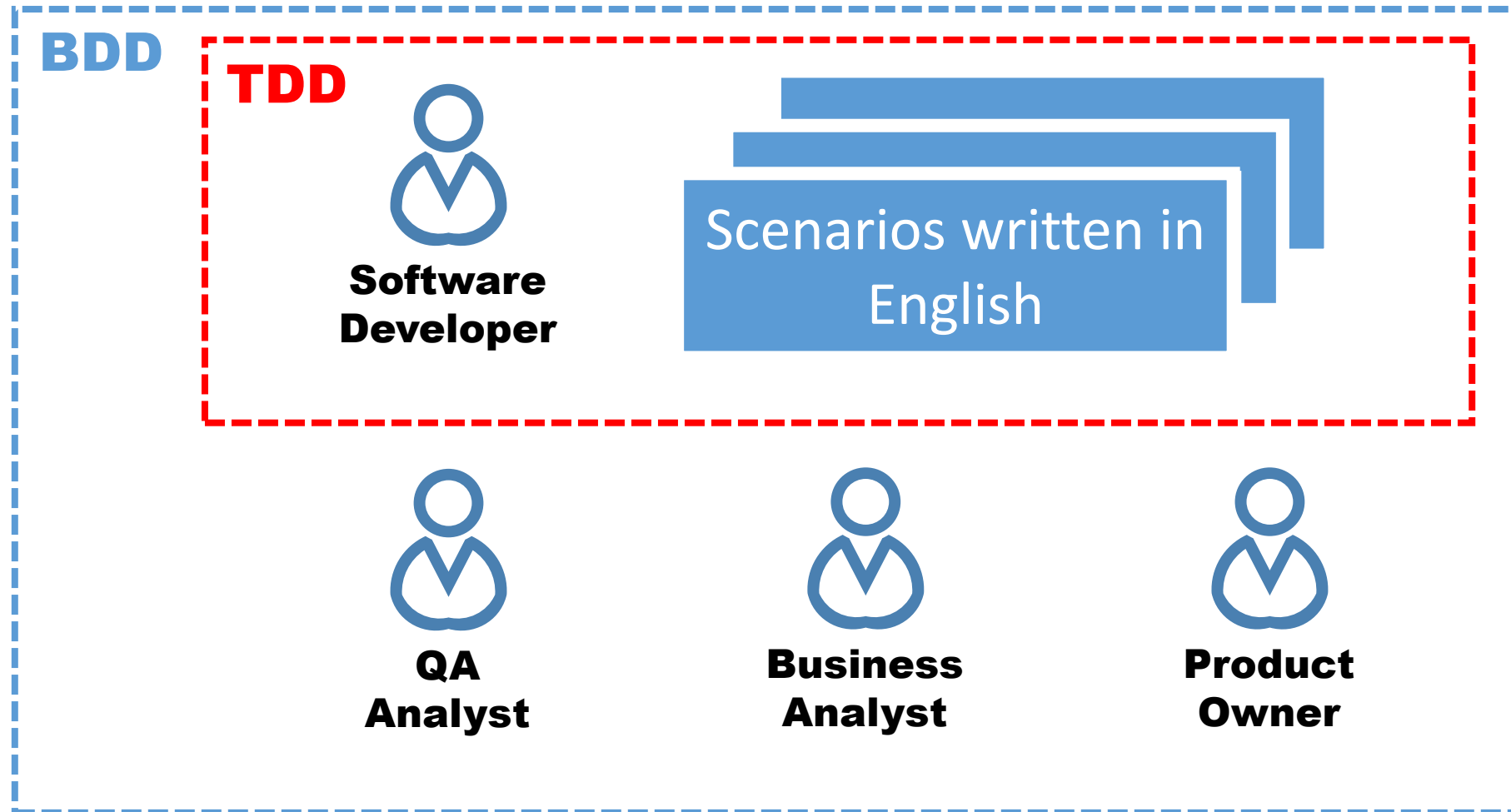
**Misunderstanding all the time!**

# The main idea behind BDD ...



**... is to prevent communication gaps!**

# The main idea behind BDD



# Benefits of BDD

1. **Collaboration / Communication** - same language for all
2. **Quality** – functional / integration / regression tests
3. **Prioritisation** - business and behaviour first
4. **Documentation**



# What is BDD?

Agile technique based on TDD...

...that promotes communication and close collaboration between everybody in the team...

...and focuses on writing specifications of the system behaviour.

# BDD solves TDD shortcomings

What to test and what not to test

Where to start with development

How to understand why tests fail

# BDD features / stories

**As a [Role]**

**I want [Feature]**

**So that I receive [Value]**

**As a user**

**I want to login**

**So that I can access my account**

# BDD scenarios

**Given some initial context**

**When an event occurs**

**Then ensure some outcomes**

**Given I am on the login page**

**When I login as “jsmith” with password “secret”**

**Then I should see my account page**

# What is BDD scenario?

**Specification** that everybody understands

**Documentation** that everybody can refer to

**Automated** test that can be run any time

# BDD with Drupal

## Behat

- Tests / scenarios in a human-readable language called Gherkin
- Parses scenarios into executable test-cases

# BDD with Drupal

## Mink

- Web acceptance tests
- Provides step definitions for interactions with a browser

# BDD with Drupal

## Drupal Extensions

- Provide Drupal specific scenarios and step definitions
- Set up test data with Drush or the Drupal API
- Define theme regions and test data appears within them
- Clear the cache, log out, and other useful steps

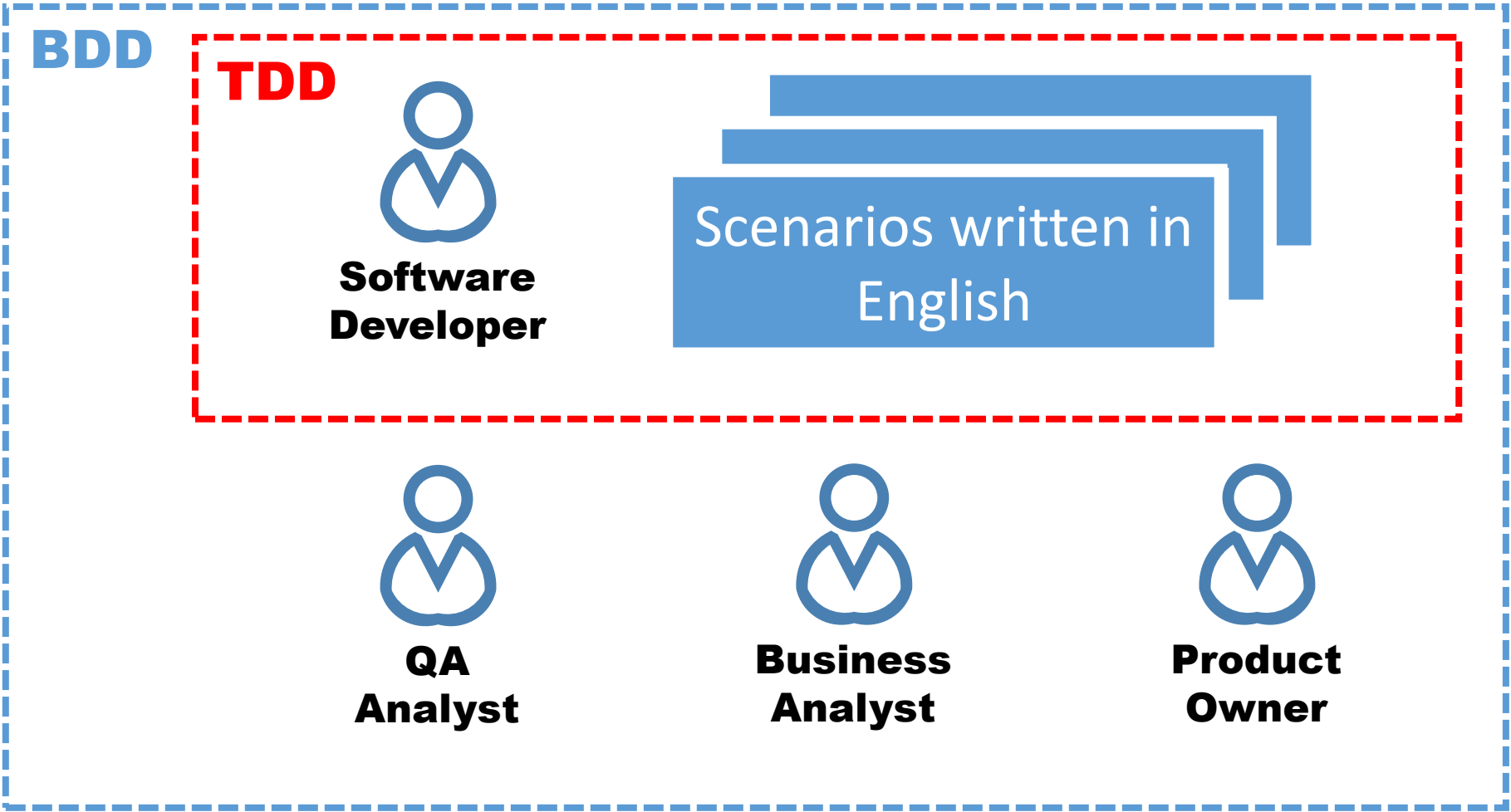


# BDD with Drupal

## Drupal Extensions

- Blakbox Driver
- Drupal API Driver
- Drush Driver

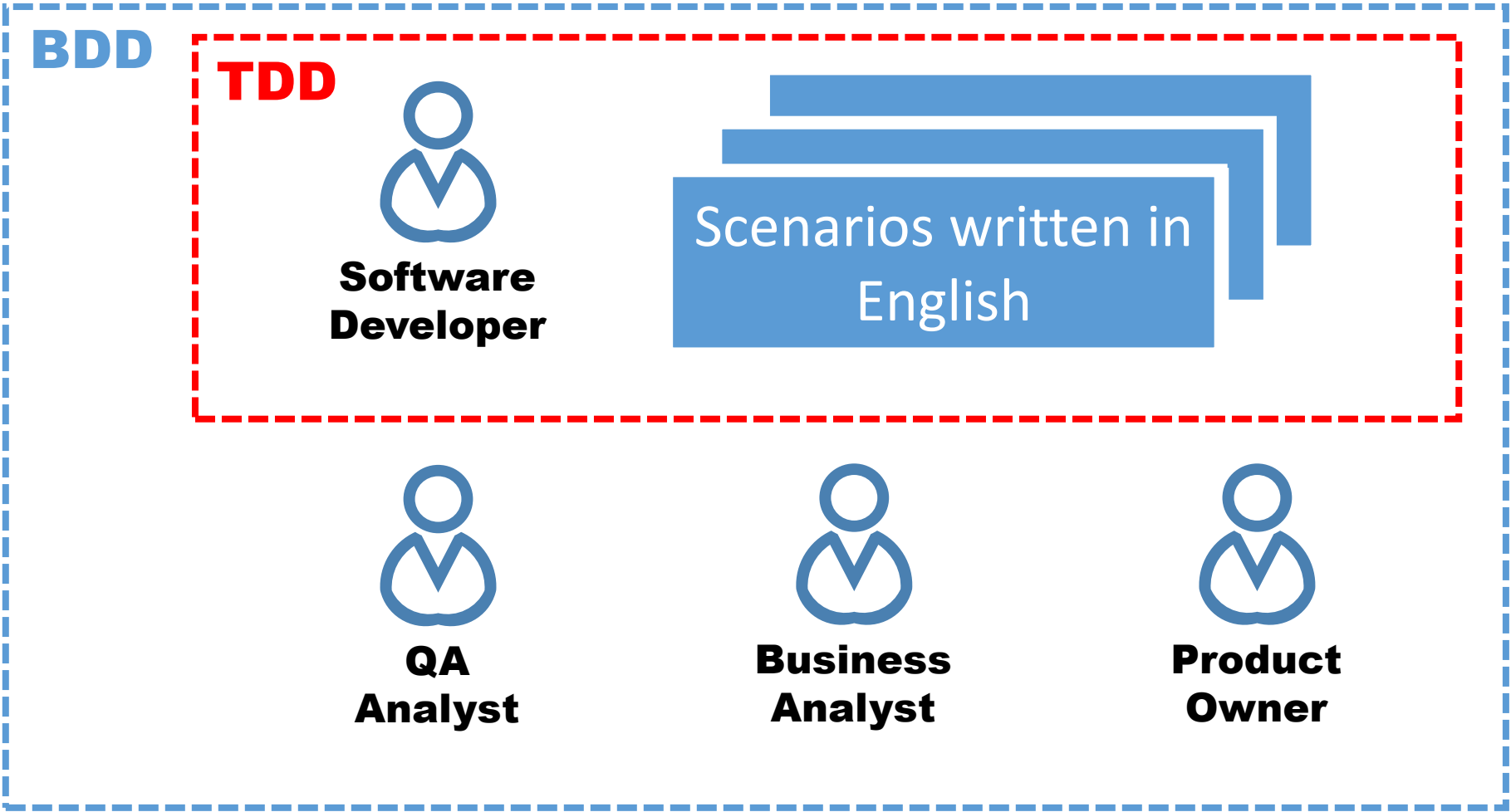
# Can everybody access scenarios?



# Can everybody access scenarios?

## Behat JIRA extention

# Can everybody access scenarios?



# Any drawbacks?

Increases the cost of maintenance

Before doing BDD make sure that there is...

**...enough return on investment to justify it!**

# BDD in Business

# Dennis Publishing

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# Dennis Publishing

“After the decision to move our websites onto Drupal, adopting Behaviour Driven Development has been one of the best decisions we’ve made for our organization in years.”

Paul Lomax - CTO, Dennis Publishing



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13	Simon Percival	08/10/2015 12:24:17	£50	12.00%	
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# BANK OF ENGLAND

dkan

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Try out standard DKAN functionality in a sandbox environment. Search for datasets directly from the homepage or by navigating to the Datasets search page where you can facet by tags, groups and format.



DKAN's data previewing tool has many powerful features

You can add a Dataset to get a sense of publisher workflow. This form can be customised to require many additional fields. In this demo only the most basic fields are required.

election politics transparency

Search



## Geospatial Data Explorer Examples



DKAN can plot both latitude and longitude as well as GeoJSON on a map.

## Data Explorer Examples



This group contains various real datasets that show DKAN's data previewer in action. The previewer...

# References

**Dan North & Associates** - <http://dannorth.net>

**Behat** - <http://behat.org>

**Mink** - <http://mink.behat.org>

**DSpeak** - <http://dspeak.com/drupalextension/intro.html>

# Thank you

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