



SEMANTIC TECHNOLOGIES AND SEMANTIC WEB STRUCTURING DATA FOR STI POLICY ANALYSIS

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SESSION 3

SUPPORTING STI POLICY ANALYSIS THROUGH EMBEDDED ANALYTICAL AND VISUALISATION TOOLS

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REITER

Visualisation Tools with
Embedded Analytical Capabilities

Brief Overview of Planned
Activities

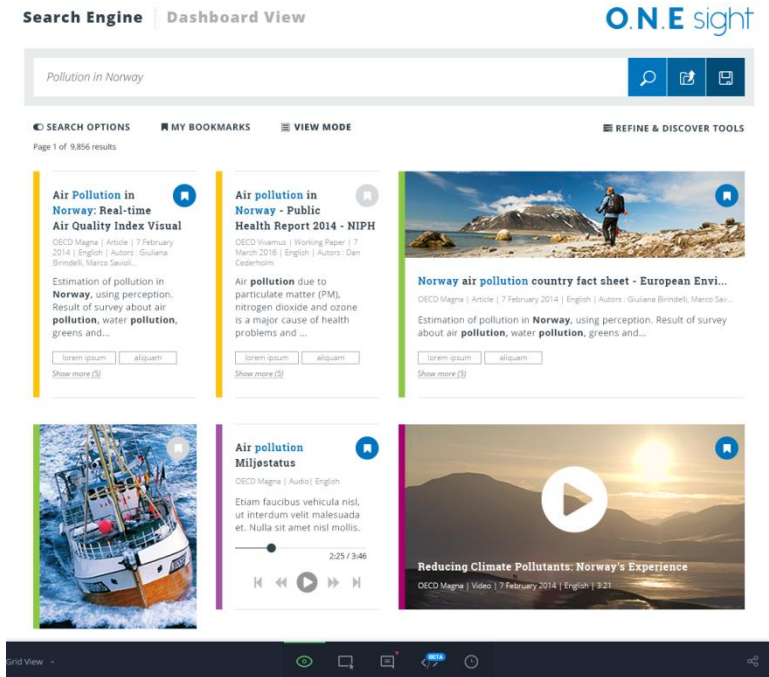
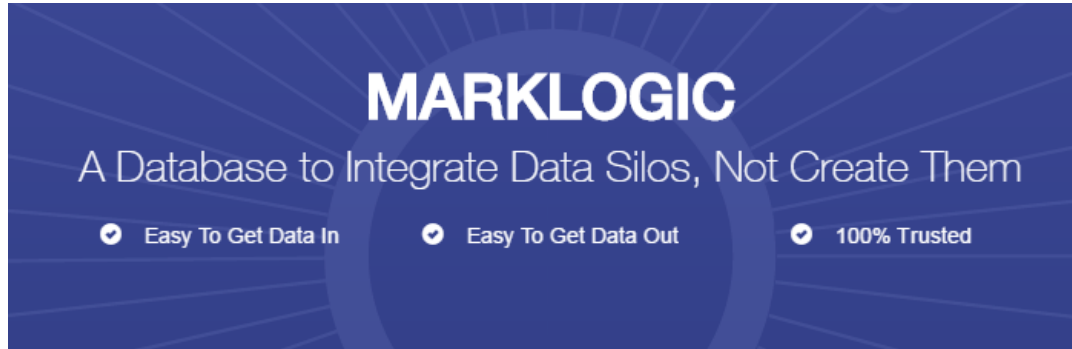


Grasping data on policy initiatives through visualisations with embedded analytics

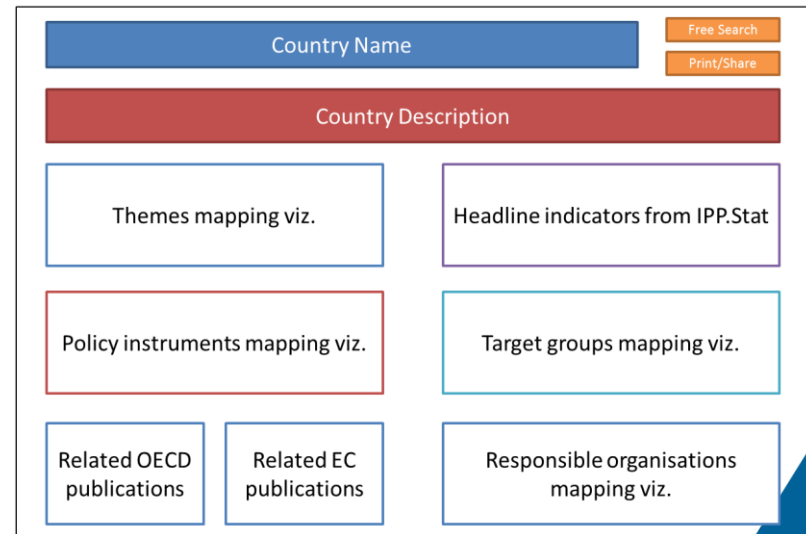
- Objectives within this work package
 - Provide interfaces for **search** and **discovery** of the data collected, guiding policy-makers and analysts through **knowledge pathways** in the database
 - Within these interfaces, provide various forms of **interactive charts** that allow to **interpret** data.
 - Facilitate benchmarking (e.g. different country approaches to common challenges)
 - Identify clustering in certain policy practices



Based on a MarkLogic database with a bespoke UI



Country Dashboard Panels could be arranged differently

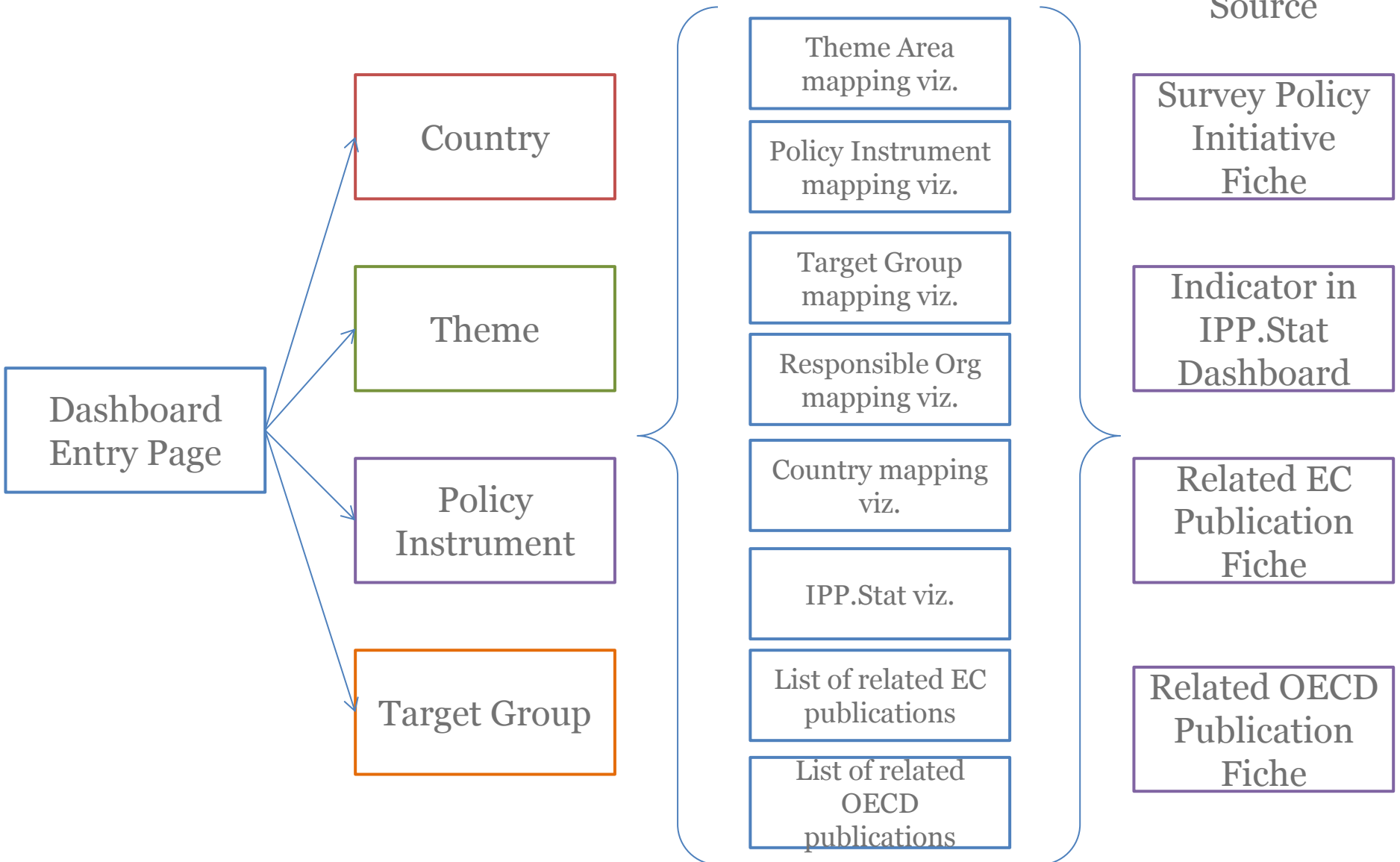


Overview of dashboards and results pages

Primary Dashboards

Interactive Dashboard Panels

Ultimate Info Source





Dashboards Entry Page

Introduction to EC-OECD STIP Database

Free Search

Explore Themes (through
interactive viz.)

Search by Country
(through interactive map
viz.)

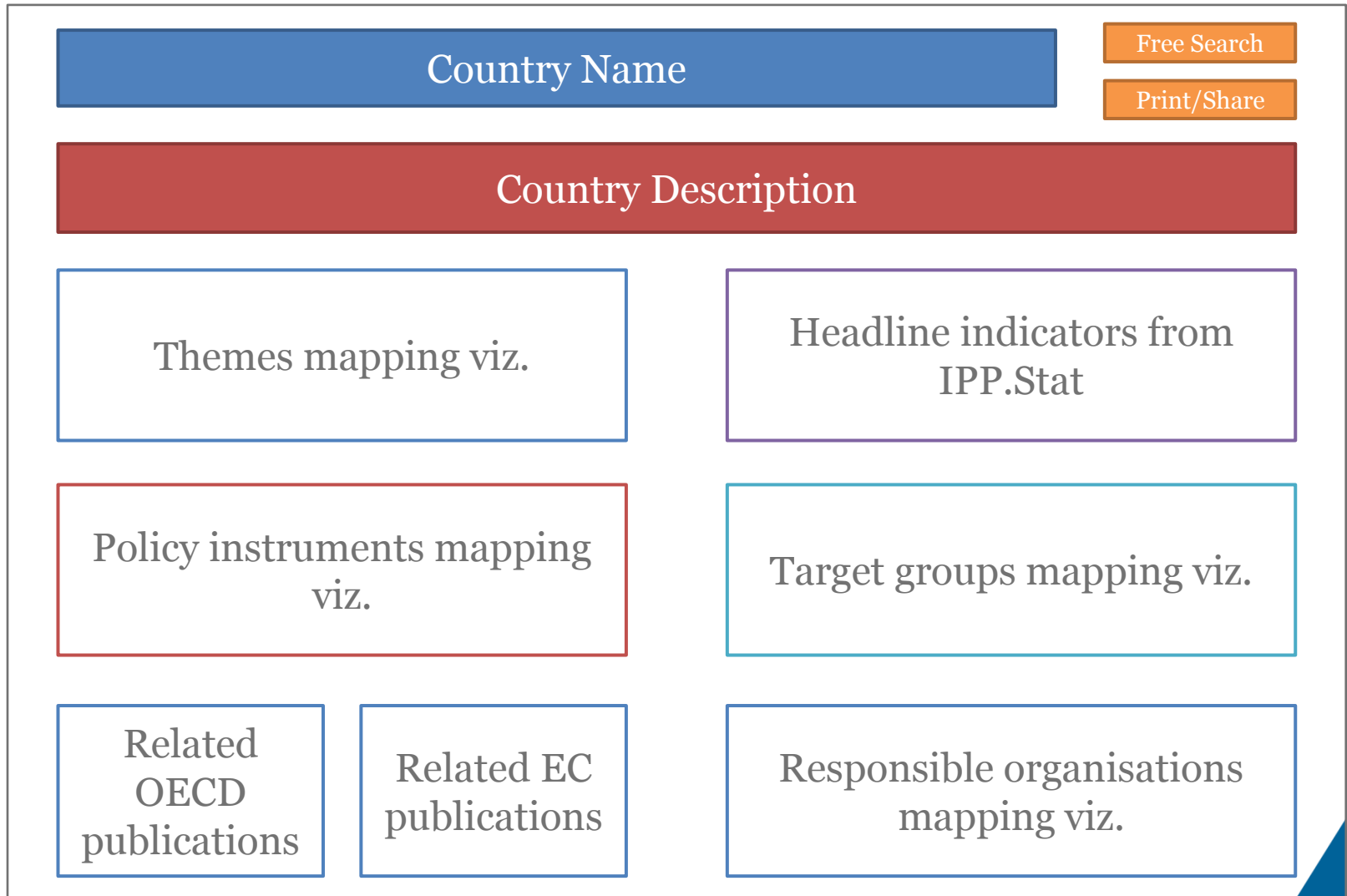
Explore Policy
Instruments (through
interactive viz.)

Explore Target Groups
(through interactive viz.)



Country Dashboard

Panels could be arranged differently





Queries to be embedded in various dashboards

Dashboard \ Panel	Theme area mapping	Policy instrument mapping	Target group mapping	Response
Country	<ul style="list-style-type: none"> -RANKING A: In what theme areas does the country has most initiatives? -RANKING B: In what theme areas does the country assign the highest budgets? -BENCHMARK: How do Rankings A and B compare to other countries? -How closely related are themes within the country? -How has interest in themes evolved over time? 	<ul style="list-style-type: none"> -RANKING A: What instruments are more prevalent in the country? -RANKING B: What instruments have the highest budgets in the country? -BENCHMARKING A: How does RANKING A and B compare to other countries? -BENCHMARKING B: What is the average configuration (facet choices) of instrument X and how does it compare to other countries? How does it compare with the distribution of configurations in the sample? 	<ul style="list-style-type: none"> -RANKING A: What target groups are associated with the highest budgets within the country? -RANKING B: How concentrated are the country's policy initiatives within a target group? -BENCHMARK: How does RANKING A and B compare to other countries and the sample average? 	<ul style="list-style-type: none"> -How are the country's policy initiatives in terms of: <ul style="list-style-type: none"> * Initiatives * Initiatives * Initiatives Note: perhaps weighted by budget
Theme	<ul style="list-style-type: none"> -How are themes related to each other? -What themes have the highest amount/budget of policy initiatives? 	<ul style="list-style-type: none"> -What policy instruments are more prevalent within the theme? -Is there clustering of certain policy instrument facets within the theme? Is it distinct from the combinations found in other themes? 	<ul style="list-style-type: none"> -What target groups are more present in initiatives submitted under the theme? -What is the distribution of target groups under the theme? Could this be weighted by total budget assigned to target group by theme? 	
	-Which themes are most associated with	-What is the average and distribution of	-RANKING A: What target groups are more	

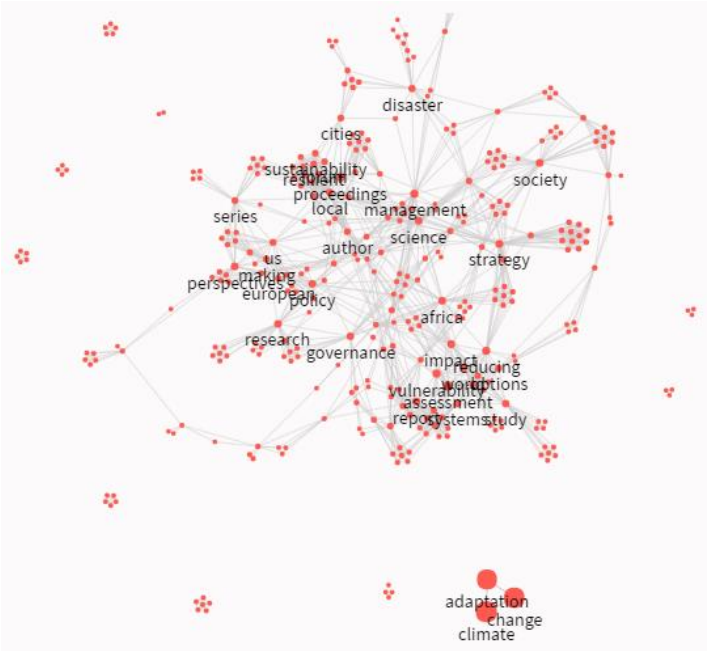
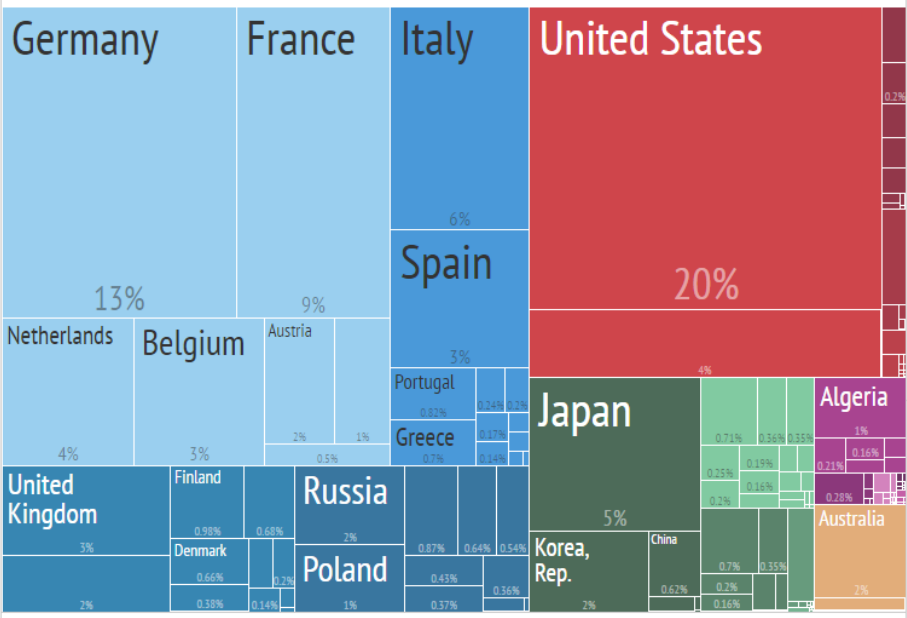
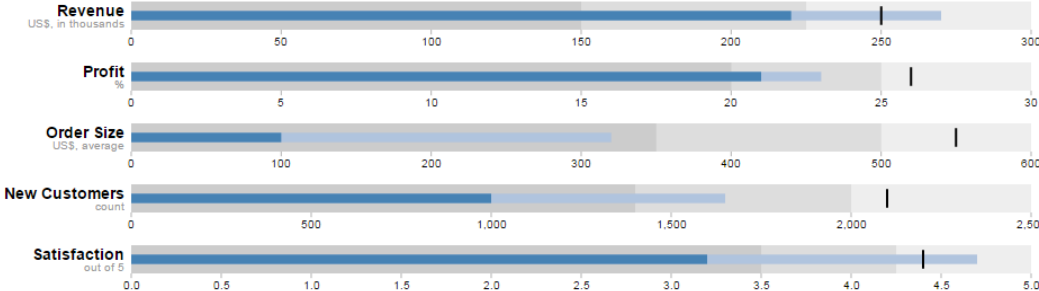
Examples of interactive visualisations for the dashboards (1/2)



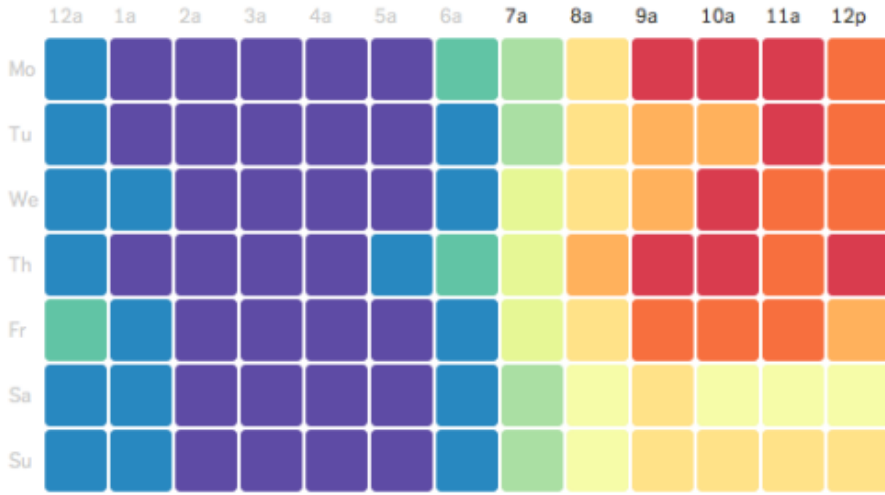
Line Graph



Bubble Chart



Examples of interactive visualisations for the dashboards (2/2)



SIZE
4,771,135 tweets from
1,780,225 distinct users

KEY

