Quarterly review Discovery Q4 - 2015/16

Approximate team size during this quarter: 12 FTE *Time spent: strengthen 40%, focus 30%, experiment 30%*

Key performance indicators

User satisfaction	Start Q4: 35%	End Q4: 39%	YoY
Zero Results Rate	Start Q4: 30%	End Q4: 23% (now excluding queries before incorrectly counted as zero results)	YoY

Objective: Improve inter-wiki integration



Objective	Measure of success	Status
Enhance search results and expose users to other interesting content by improving interwiki search integration. Team members involved: 5	 Run A/B tests that: Uses <u>TextCat</u> to detect the language of the user's query Adjusts results to match that language Depending on user feedback and metrics, roll out as production feature 	A/B test was launched, data inconsistencies were found A/B test was relaunched but insufficient data was collected A/B test was left running to collect more data Analysis is expected to be finished mid-July

Although the delay is unfortunate, it's definitely a good thing that our standard A/B testing processes caught these issues to prevent us drawing incorrect conclusions from faulty data.

We ported TextCat to PHP and it's available as a library: https://github.com/wikimedia/wikimedia-textcat

Objective: Upgrade Elasticsearch



Objective	Measure of success	Status
Add real-time index updates to completion suggester and improve stability and performance by upgrading to Elasticsearch 2.x Team members involved: 5	Upgrade search cluster to Elasticsearch 2.x Add real-time index updates to completion suggester	Successfully upgraded to Elasticsearch 2.3 Real-time index update feature was removed from Elasticsearch 2 by Elastic so we're unable to add this feature to completion suggester at present; will do so after Elasticsearch 5 upgrade

Despite the real-time index feature being delayed to Elasticsearch 5 (the next major version), we proceeded with the upgrade because keeping the software up to date is important. Elasticsearch 2 also allows us to switch from <u>tf-idf</u> to <u>BM25</u> in Q1 2016/17 which should fix a multitude of search result relevance issues; e.g. searching for "kennedy" doesn't give you "John F. Kennedy" in the first page of results!

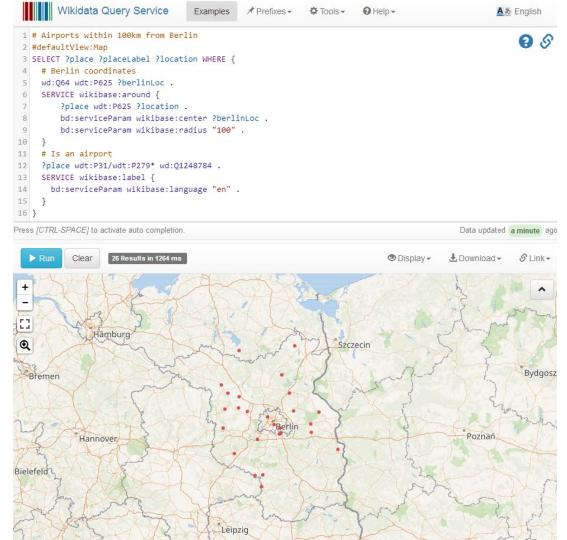
Objective: Geospatial queries for WDQS



Objective	Measure of success	Status
Allow users to perform geospatial queries by adding support for geocoordinate functionality into Wikidata Query Service (WDQS). Team members involved: 2	Add support for geo-coordinate functionality to Wikidata Query Service in production	This was done! Results on <u>query.wikidata.org</u> integrated with maps service piloted by Discovery to present appealing visualisation of results to let users explore (example on next slide).

Usage of the service is holding strong and slowly trending upwards over time; we continue to invest in keeping the service stable.

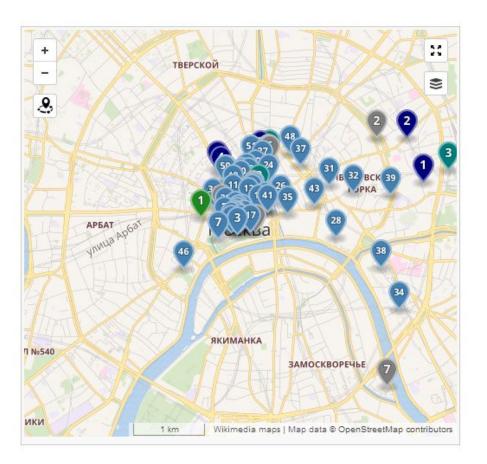
Example: Geospatial queries for WDQS



Objective: Native maps on Wikivoyage



Objective	Measure of success	Status
Address Wikivoyage concerns to replace wmflabs-based hack maps with production level maps using OpenStreetMap data. Team members involved: 4	Wikivoyage sites switch away from Labs-based client code for maps and instead use the Kartographer extension in articles	This was done! Wikis are slowly migrating to new maps. We continue to gather their feedback on what's missing.



Objective: Understand Wikipedia map needs



Objective	Measure of success	Status
Understand Wikipedia map user stories, user flows, and key activities. Team members involved: 4	A wiki page with a list of user stories, mockups and diagrams of how maps will be used in various scenarios, based on user experience and community discussions.	Conversation held with users and interested parties. Lots of good feedback was received. Plan for Q1 is to enable maps on all wikis except Wikipedia (for capacity reasons).

https://www.mediawiki.org/wiki/Maps/Conversation_about_interactive_map_use

Objective: Improve www.wikipedia.org



Objective	Measure of success	Status
Make wikipedia.org a portal for exploring open content on Wikimedia sites. Team members involved: 3	Run at least three A/B tests to decrease the page's 44% bounce rate and increase click-throughs. Graduate at least one successful A/B test to production.	 A/B tests were run for: 1. Improved footer with descriptive project text 2. Language detection to resort primary links 3. Collapsing secondary language links into a dropdown 1 and 2 were graduated to production this quarter; 3 has an
		ongoing <u>public conversation</u> about deploying

Check out the screenshots (in the appendix) for work we've recently pushed to production :-)





Category	Workflow	Comments	Туре
	Head of Discovery	Due to the departure of Tomasz Finc, Katie Horn took over as Head of Discovery on 30th May.	R
Staffing and hiring	Data Analyst	Opened hiring to backfill for Oliver Keyes on 1st March. Candidate accepted offer on 30th June. Exactly one quarter! :-)	R
Stanling and mining	Senior UX Designer	Currently working on job description. Expected to open July 2016.	R
	Engineering Manager	On hold at present, pending other hiring. Expected to open July 2016.	N



Tests and Surveys:

- A/B test for adding descriptive text on sister project links
- A/B test for browser language detection and re-sorting of top 10 language wiki links
- Qualtrics survey asking 'how did you arrive at wikipedia.org'
- A/B test for collapsing secondary language links into a dropdown

Production releases:

- descriptive text on sister project links
- browser language detection and re-sorting of top 10 language wiki links
 - also localized 'The Free Encyclopedia' phrase

20th May: new footer with descriptive text for sister wiki projects



Source: https://www.wikipedia.org

The effect: users are more likely to notice the sister project links and navigate to them - to go to a Wikivoyage and beyond!



Source: https://en.wikivoyage.org

2nd June: browser language detection, re-sorting of top 10 links based on language preference and localized *The Free Encyclopedia*





Source: https://www.wikipedia.org

The effect: users are more likely to go to a Wikipedia in their language



Source: https://lv.wikipedia.org

End result for the Wikipedia.org Portal:

We've updated a widely used multi-lingual entry point into Wikipedia

To be *even more easier* to use to discover new knowledge!



Source: https://www.wikipedia.org