

# Quarterly review

## Discovery

Q3 - 2015/16

Approximate team size during this quarter: ... 13.5 FTE  
*Time spent: strengthen 40%, focus 30%, experiment 30%*

Key performance indicators

User satisfaction	Start Q3: 28%	End Q3: 35%	-- YoY
Zero Results Rate	Start Q3: 26%	End Q3: 30% (actually a decrease this quarter; seasonality makes metric fluctuate)	-- YoY

# Q3 - Discovery

Objective: Improve intra-wiki relevance



Objective	Measure of success	Status
Improve relevance of intra-wiki results. <i>Team members involved: 6</i>	Roll out <a href="#">completion suggester</a> as a beta feature.  Depending on user feedback and metrics, roll out completion suggester as production feature.  Review ElasticSearch configuration and use <a href="#">RelForge</a> to optimise configuration for relevance.  Integrate page view data into result ranking to improve relevance.	Completion suggester was rolled out as beta feature at end of Q2  <a href="#">Feedback</a> on suggester was positive, with bugs reported and fixed  Page view data was integrated into completion suggester ranks  Completion suggester was <a href="#">rolled out</a> to production on all wikis in collaboration with Comms  <a href="#">A/B test on phrase rescore</a> was run after RelForge optimisation

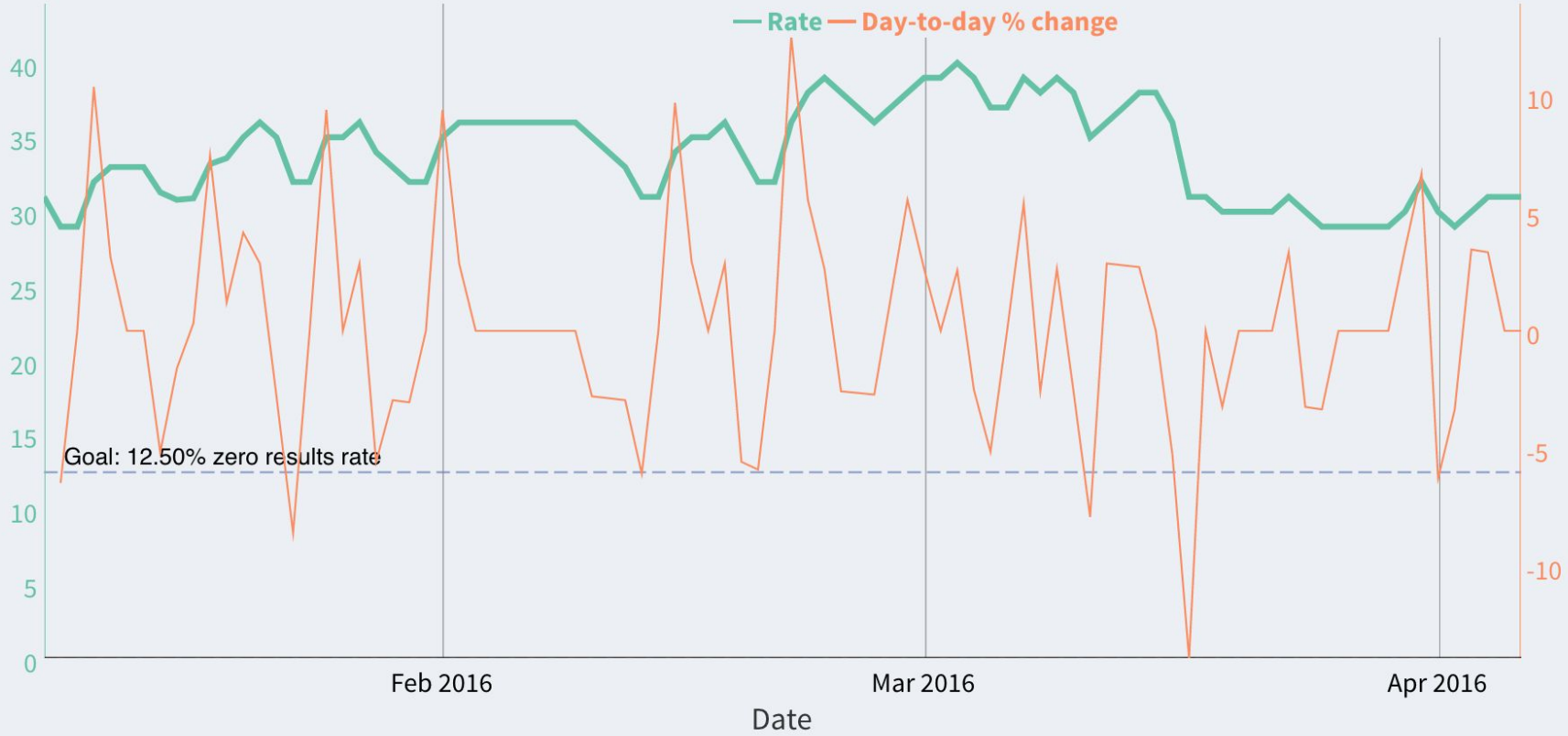
Completion suggester launch significantly reduced the zero results rate (see graphs on next slides)

Next quarter: focus on improving language support for multilingual users and on upgrading ElasticSearch to improve completion suggester.

# Zero results rate over time

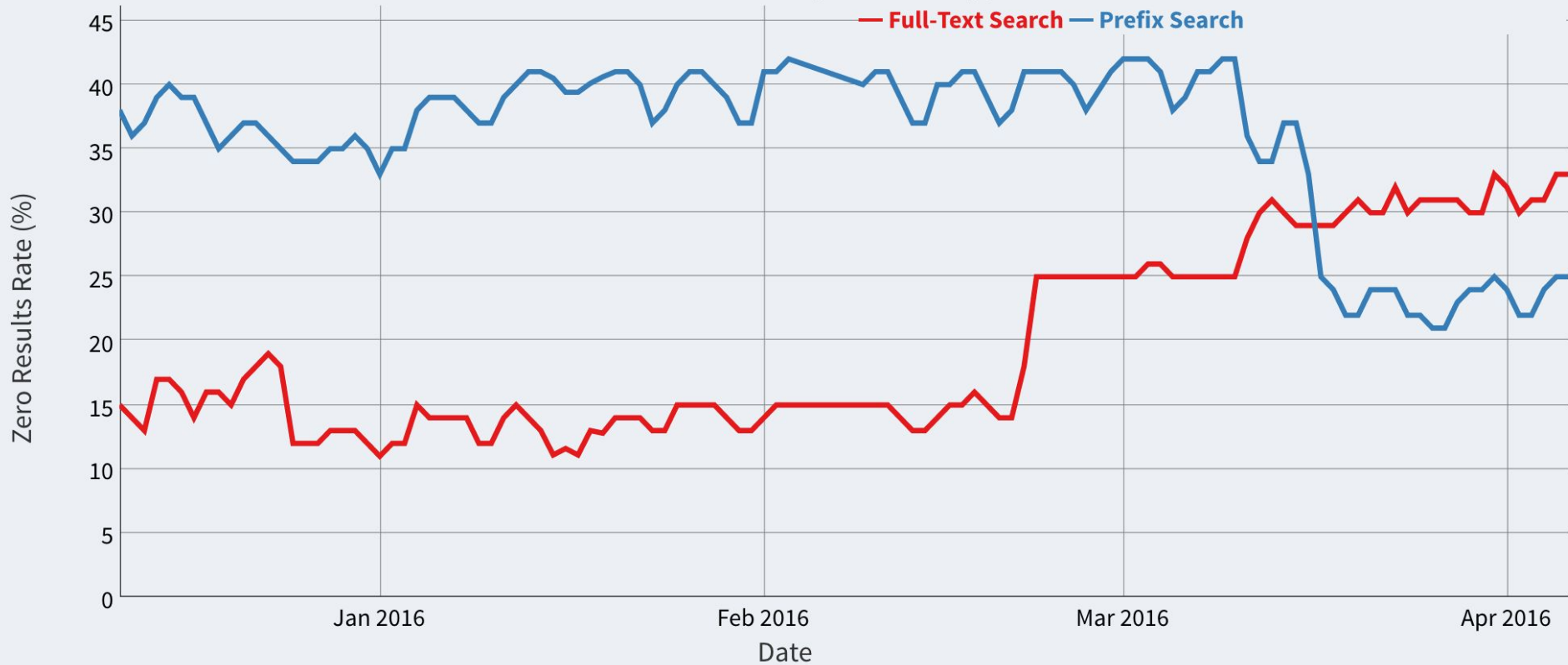
— Rate — Day-to-day % change

% of search queries that yield zero results



## Zero result rate by search type

— Full-Text Search — Prefix Search



# Q3 - Discovery

Objective: Generate satisfaction model



Objective	Measure of success	Status
<p>Generate a model for user satisfaction with search results based on qualitatively-validated quantitative data. <i>Team members involved: 0</i></p>	<p>Run survey on-wiki asking users who came from search if they found what they're looking for.</p> <p>Tie responses back to clickthrough data and use to validate search satisfaction metric.</p>	<p>Insufficient capacity in team in Q3 to proceed with this goal</p> <p>Team will continue to use <u>existing, unvalidated model</u></p>

# Q3 - Discovery

Objective: Improve [www.wikipedia.org](http://www.wikipedia.org)



Objective	Measure of success	Status
Make <a href="http://www.wikipedia.org">www.wikipedia.org</a> a portal for exploring open content on Wikimedia sites. <i>Team members involved: 4</i>	Run at least 3 A/B tests aiming to decrease page's 60% bounce rate by increasing 30% search rate and 10% language link click rate.  Graduate at least 1 successful A/B test to production on the portal.	Two A/B tests ran successfully: <a href="#">search box update</a> and <a href="#">detecting browser language</a> . Third test was not run due to running out of time. Team size was decreased by 1 in March.  First test was successful at increasing search rate and was pushed to production (see appendix for screenshot).

[Analysis](#) of the search box test showed a significant improvement with 1.7 to 5.5% more sessions ending in a click-through to search results. This increase corresponded with a decrease in the page's bounce rate, showing that these extra clicks were not cannibalised from other interface interaction.

Analysis of the browser language test is still in progress and [more A/B tests are planned for Q4](#).

## Q3 - Discovery

### Objective: Upgrade Wikidata Query Service



Objective	Measure of success	Status
Support ongoing stability and add ability to support geocoordinate functionality by upgrading Wikidata Query Service to Blazegraph 2.0. <i>Team members involved: 2</i>	Upgrade to Blazegraph 2.0. Figure out what we need to do to support geocoordinate functionality in Wikidata Query Service.	Successfully upgraded to Blazegraph 2.0 <a href="#">Proof of concept</a> created in Labs for geocoordinate support

Operational responsibility for Query Service in the process of being transitioned to Guillaume Lederrey, Discovery's new operations engineer.

Next quarter: implement and release geocoordinate functionality.

## Q3 - Discovery

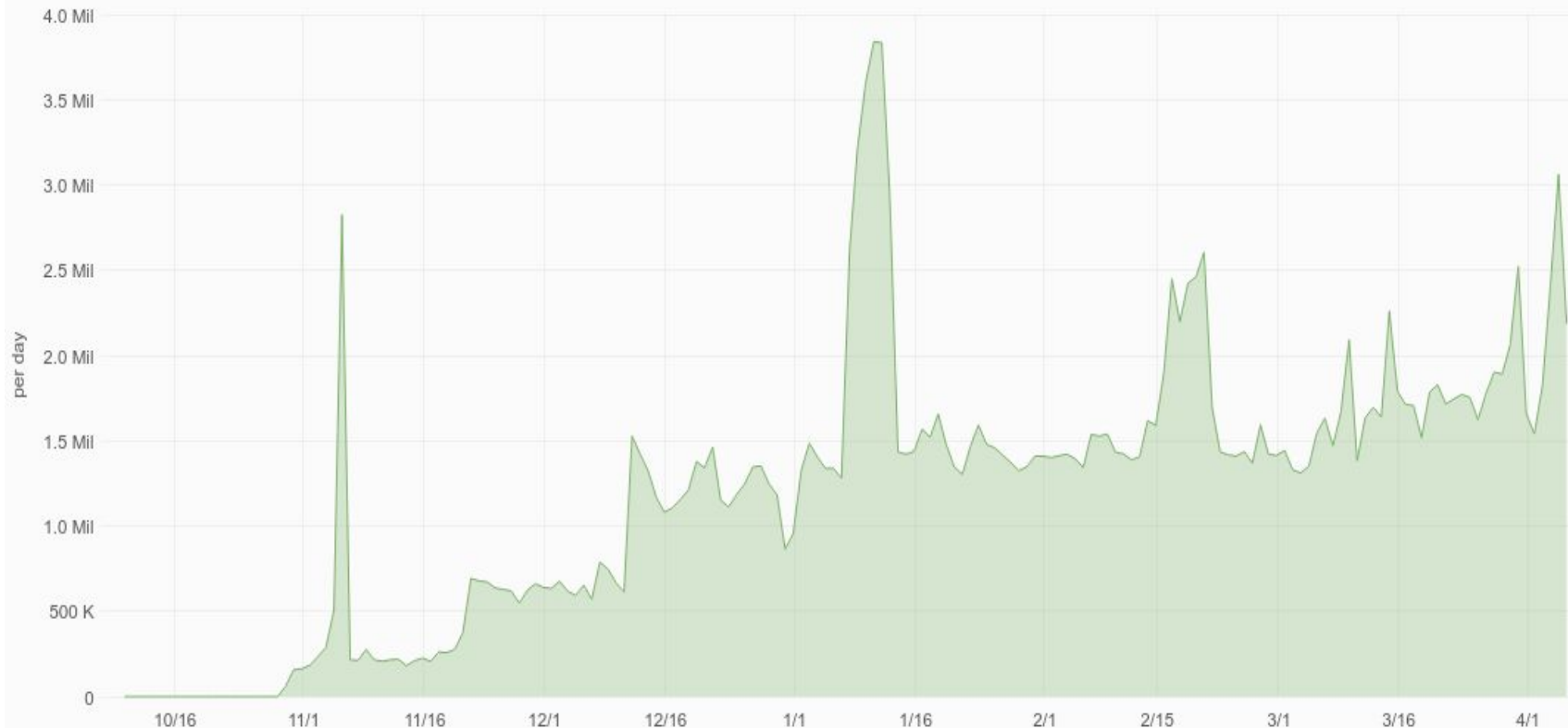
**Objective: Migrate Wikivoyage to new map tile service**



Objective	Measure of success	Status
<p>Improve the content discovery experience by switching the default tile service to the Wikimedia Maps Tile Server on all Wikivoyages.</p> <p><i>Team members involved: 3</i></p>	<p>Encourage most active Wikivoyage contributors to switch to Wikimedia maps tile server.</p> <p>Change default tile service for Wikivoyage across all languages to Wikimedia maps tile server.</p> <p>Increase unique users of Wikimedia maps tile server.</p>	<p>All WikiVoyage except NL-wv has switched to the new map tile service.</p> <p><a href="https://grafana.wikimedia.org/dashboard/db/service-maps-varnish">https://grafana.wikimedia.org/dashboard/db/service-maps-varnish</a></p>



# Map Tile Servers Usage



# Q3 - Discovery

Category	Workflow	Comments	Type
Operational excellence	Onboard operations engineer	Guillaume Lederrey joined Discovery as an Operations engineer in Q3. He was onboarded and operational responsibilities were transferred to him.	N
	<a href="#">Encrypt ElasticSearch traffic</a>	Encrypt traffic between Elasticsearch and MediaWiki, increasing security and ensures content can be served in the case of failure of primary data centre. <small>(Almost all the work was undertaken in Q3; the work was finished in the few days between the end of the quarter and the creation of this slide deck)</small>	N
	<a href="#">Upgrade Elasticsearch to 1.7</a>	Upgrade Elasticsearch to 1.7, improving performance and facilitating our upgrade to Elasticsearch 2.x (and, later, Elasticsearch 5.x).	M

Default algorithm	Completion Suggester
