roastmarket

THE BOUTIQUE AGENCY

CASE STUDY | Google Mobile Web

Spring 2022
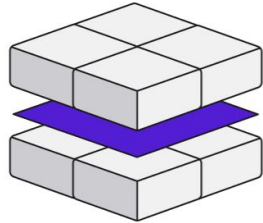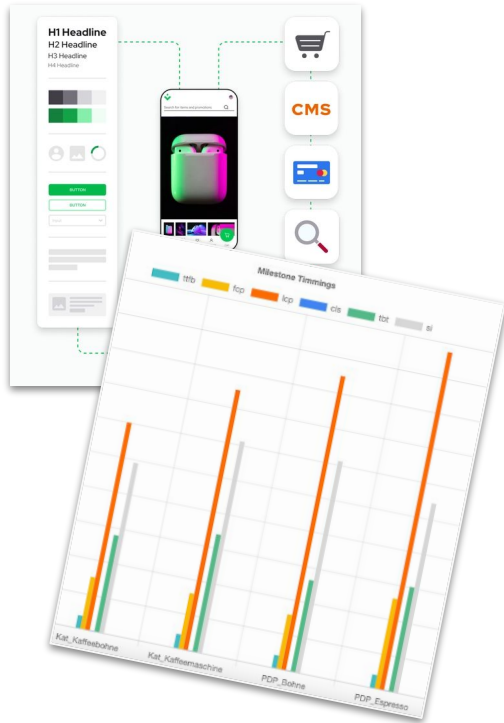
roastmarket & The Boutique Agency are long-term partners in online marketing. In 2021, **roast**market focused on SEO.

In 2021, **roast**market also switched to a headless CMS and the boutique agency's SEO team guided this change in terms of website quality.

After successfully switching to the Headless CMS, the focus of the SEO strategy was on an improved mobile experience as well as web performance.

For this, The Boutique Agency took a methodical approach and was able to gain feedback from Google for the project in the course of the mobile certification of the agency's SEO department.

The Team

Darius Greulich

Director Customer Experience

Michael Ryvlin

Director IT

Patrick Täufer

Frontend Developer

CASE STUDY TEAM

The Boutique Agency & **roast**market Team

Lisa Fellinger

Team Lead SEO

Alin Radulescu

Technical SEO
Consultant

Despina Fronimaki

Technical SEO Lead

Sarah Zeus

Specialist Automation
& Content

Verena Lahner

Specialist Website
Usability

Johanna Dietrich

Specialist Website
Usability

TEAMWORK
roastmarket & The Boutique Agency

ROASTMARKET

Michael Ryvlin and Patrick Täufer led the technical discussions, suggested areas for improvement, and conducted testing and implementations.

THE BOUTIQUE AGENCY

Lisa Fellinger and Alin Radulescu analyzed the web performance of **roast**market and provided optimisation recommendations.

Initial Situation

WHO IS ROASTMARKET?

roastmarket is on the way to becoming the online market leader in coffee retailing

roastmarket is a fast-growing e-commerce company specializing in coffee products, such as coffee beans and coffee accessories like machines, but also tableware.

In July 2021, **roast**market was acquired by 72 % of the German coffee company Melitta and aims to become Germany's online market leader in coffee retail.

roastmarket

Europe's largest online retailer for coffee, coffee machines and accessories (>4,000 products)

Founded: 2014

Our Mission: To Provide the Best Customer Experience for Coffee Lovers & show the full world of Coffee to everyone

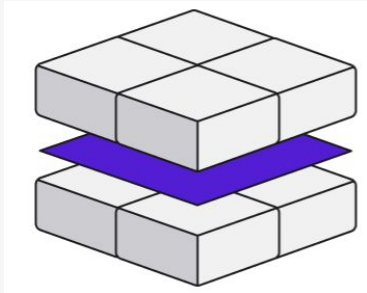Our purpose: great coffee for everyone & everywhere

Over 65.000 happy customers

Switch to Headless CMS via Vue Storefront
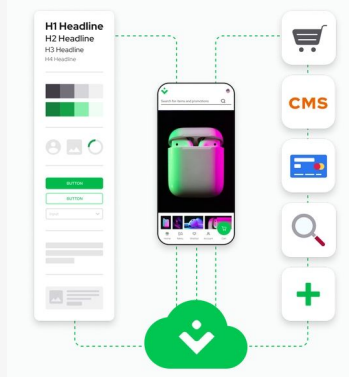
Better Mobile Experience
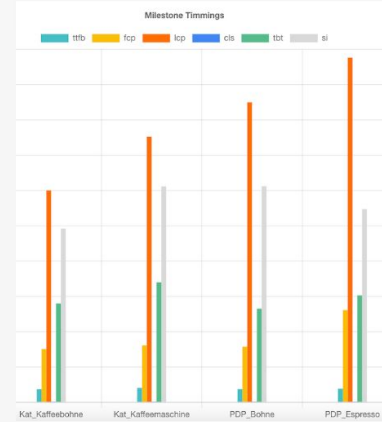
Web Performance Optimisation
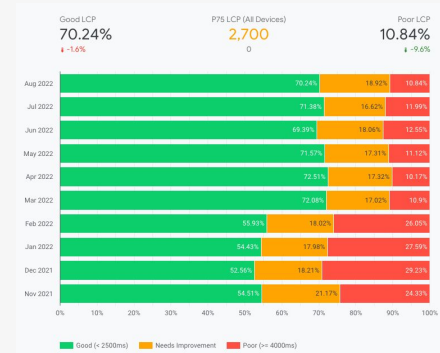
Google Core Web Vital Optimisation

In order to achieve their goal of becoming Germany's online leader in the coffee selling business, they are very open to change.

Milestone Timmings

The inventory of performance metrics showed that optimisations should be focused on reducing Total Blocking Time and Largest Contentful Paint load time as well as Cumulative Layout Shift on category pages and PDPs.

y-axis: in ms

The loading times were compared for the Largest Contentful Paint from www.roastmarket.de/ and

a) www.coffeecircle.com/, because it is a competitor in the industry, and

b) www.tally-wejil.com/de_DE/ due to the use of the same CMS.

Here, **roast**market.de was in second place behind coffeecircle.com in February 2022.

Competitor comparison for specific page types on relevant keywords

page type & keyword

competitor

Startseite	Kat_Kaffee	Kat_Kaffeebohne	Kat_Kaffeemaschine	PDP_Bohne
211208_BiDcQG_a69a51267l	211208_BiDcN0_d2627dce1C	211213_BiDcSY_3af39129ca5	211208_AiDcXC_a330ad6dbe	211213_BiDcV2_acc0e49686

Competitors	Competitors	Competitors	Competitors	Competitors
Coffeecircle	Coffeecircle	Kaffee24	Kaufland	Esspressimo
211208_AiDcJT_2a148f3ebbf	211208_AiDc98_611dd3614l	211213_BiDcXF_7f5613d952	211208_AiDc6D_48fd8b336C	211213_BiDc2W_1d45b093f
Tally Weijl	Kaffeezentrale	Kaffeevorteil	Otto	Geizhals
211208_BiDcHG_69455Be2ft	211208_BiDc9V_e35fff2a949	211213_BiDc6E_0d2a7b430a	211208_BiDcJC_d62555e67a	211213_AiDc88_309208648!

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Status Quo of the performance budgets

MIME Type	Bytes ▽	Uncompressed
js	1,246,441	4,975,654
image	905,857	908,477
html	201,612	1,160,810
css	54,532	515,754
other	25,383	118,233
flash	0	0
font	0	0
video	0	0

Taking the performance budget per page type. Here using the example of the homepage.

Source: webpagetest.org

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Challenges

CHALLENGES FOR ROASTMARKET

And possible solutions

| No internal processes for uploading images | Creation of guidelines | OBJECTIVE |

| No monitoring of speed values | Use of Pingdom for website performance values | Establishment of processes, in order to maintain good web performance values |

| Different requirements of internal departments for the website | Prioritization of departmental requirements | |

| Uncertainty in the testing process | Strong monitoring and continuous testing with rollback capability | |

Procedure

PROCEDURE
Roadmap to a better web performance
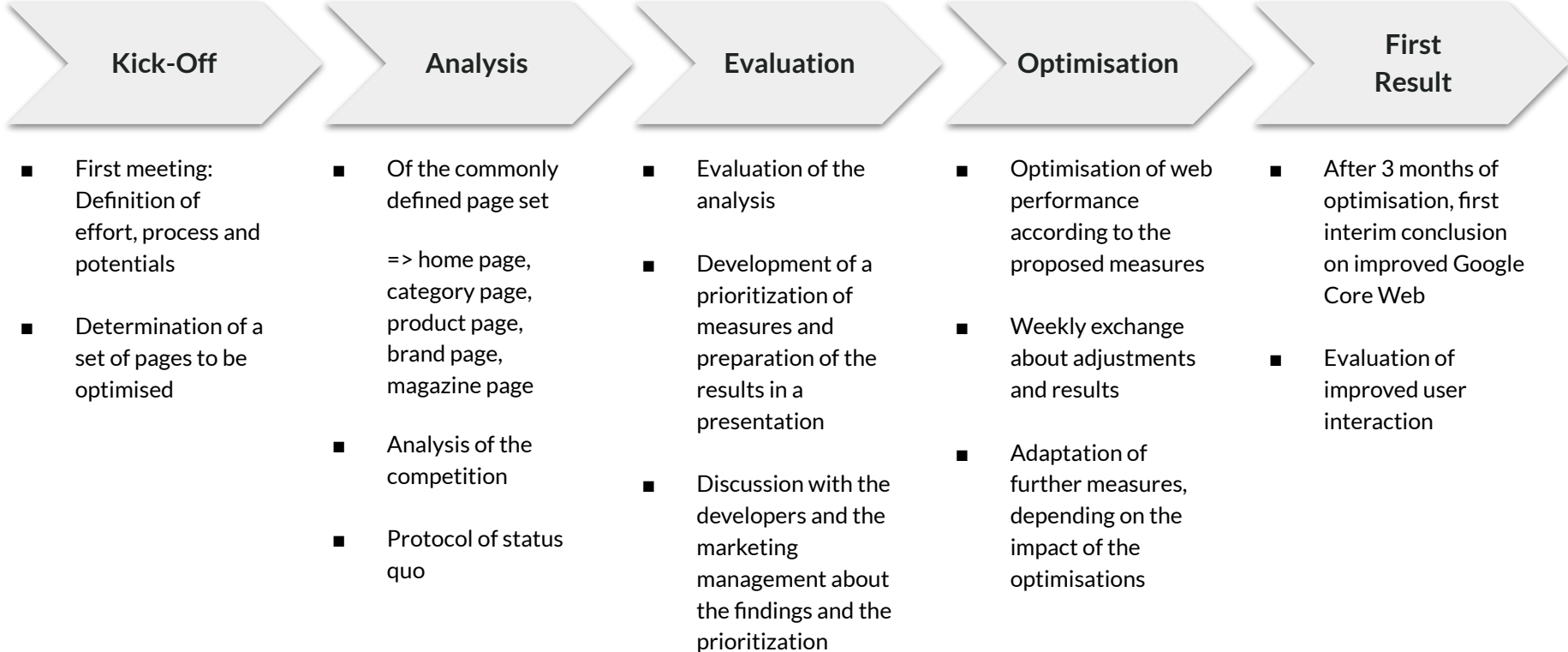
Kick-Off	Analysis	Evaluation	Optimisation	First Result

Kick-Off
- First meeting: Definition of effort, process and potentials
- Determination of a set of pages to be optimised

Analysis
- Of the commonly defined page set
- => home page, category page, product page, brand page, magazine page
- Analysis of the competition
- Protocol of status quo

Evaluation
- Evaluation of the analysis
- Development of a prioritization of measures and preparation of the results in a presentation
- Discussion with the developers and the marketing management about the findings and the prioritization

Optimisation
- Optimisation of web performance according to the proposed measures
- Weekly exchange about adjustments and results
- Adaptation of further measures, depending on the impact of the optimisations

First Result
- After 3 months of optimisation, first interim conclusion on improved Google Core Web
- Evaluation of improved user interaction

Measures

MEASURES FOR OPTIMISED GOOGLE CORE WEB VITALS

Prioritization according to impact, time and effort

Reduction JS size and execution time

The execution time of JS is 22,701 ms in total and should be reduced through targeted orchestration.

E 3   T 3   I 3

Consideration DOM size

The DOM contains 5,012 elements and should be slimmed down.

E 3   T 3   I 2

Reduction high TTFB magazine

Status quo: 1164 ms. A good value is 350 ms.
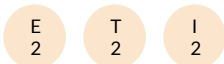
E 2   T 2   I 3

Reduction ThirdParty

A total of 20 ThirdParty Requests are made. The actual use of these requests should be checked.

E 3   T 2   I 2

Preload Fonts

Text should be visible during loading. Positive effects on FCP and LCP.

E 2   T 2   I 2

Correct sizing of the images

Many images do not have a default Width and Height, which leads to recalculation of the browser. Images should already be provided with correct dimensions.

E 2   T 1   I 2

Implementation lazy-loading

Lazyload is not yet used for images in the non-visible area. This can save time for interactivity of the page.
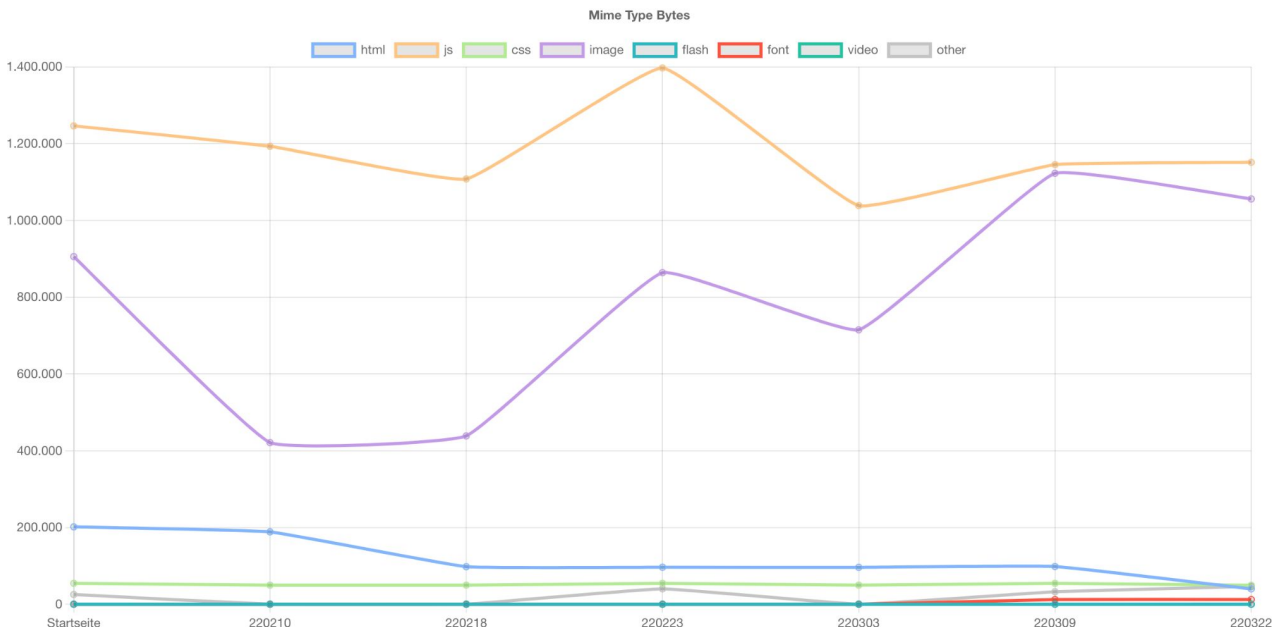
E 1   T 1   I 3

Inline load SVG-Logos

Many brand logos are currently formatted as JPGs. Since the logos are integrated in the navigation, this results in a large number of requests. Loading the logos inline can save considerable time.

E 1   T 1   I 3

E = Effort, T = TIme, I = Impact

Mime Type Bytes

Optimisation of performance budgets

1. Logging the status quo of the size of all data types.
   For example: 201,612 bytes for the HTML of the home page.

2. Determining a target value, like getting
   20 % better than the current status quo.

   → **Target**: 161, 292 bytes for the HTML of the home page in 2 months.

Timeframe

TIMEFRAME
December 2021 until March 2022

December 2021
Initial presentation of the project

January 2022
Definition of a set of pages to be optimised. Analysis and presentation of results

February
Start web performance optimisation

March
End first stage web performance optimisation

Results

SUMMARY
From the objective to the results

METRIC	Cumulative Layout Shift	Largest Contentful Paint	First Input Delay	Others
PAGE TYPE	- all pages - category pages - product pages	- all pages - product pages	all pages	all pages
RESULT	➔ no Redirects on images ➔ Inline delivery of SVG images ➔ lazy loading product images	➔ low image resolution ➔ Consent Manager is triggered by user interaction	less important scripts were placed at the end of the rendering process to speed it up	Reduction of HTML (effect on the total blocking time) => from compressed 204 kB to 189 kB

IMPROVING THE USER EXPERIENCE WHEN VISITING THE WEBSITE

Largest Contentful Paint

The Largest Contentful Paint has temporarily improved by 4 seconds and now averages 2 seconds in Repeat View (as of the end of 2022).

Source: webpagetest.org

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Largest Contentful Paint (LCP)

Origin
https://www.roastmarket.de

Source
Chrome UX Report

	Good LCP	P75 LCP (All Devices)	Poor LCP
	72,08 %	2.600	10,90 %
	↑ 28.9%	↓ -1.500	↓ -58.2%

	Good	Needs Improvement	Poor
März 2022	72,08 %	17,02 %	10,9 %
Feb. 2022	55,93 %	18,02 %	26,05 %
Jan. 2022	54,43 %	17,98 %	27,59 %
Dez. 2021	52,56 %	18,21 %	29,23 %

Quelle: CrUX-Dashboard

Cumulative Layout Shift (CLS)

Origin
https://www.roastmarket.de

Source
Chrome UX Report

	Good CLS	P75 CLS (All Devices)	Poor CLS
	76,39 %	**0,05**	**12,13 %**
	↑ 93.7%	↓ −0,3	↓ −67.9%

	Good	Needs Improvement	Poor
März 2022	76,39 %	11,48 %	12,13 %
Feb. 2022	39,44 %	22,82 %	37,74 %
Jan. 2022	30,67 %	22,52 %	46,81 %
Dez. 2021	32,76 %	20,5 %	46,74 %

Quelle: CrUX-Dashboard

IMPROVEMENT
First Input Delay

First Input Delay (FID)

Origin
https://www.roastmarket.de

Source
Chrome UX Report

	Good FID	P75 FID (All Devices)	Poor FID
	86,20 %	25	6,11 %
		0	↓ -3.4%

März 2022	86,2 %	7,69 %	6,11 %
Feb. 2022	83,43 %	10,25 %	6,33 %
Jan. 2022	86,25 %	9,15 %	4,59 %
Dez. 2021	79,56 %	11,76 %	8,69 %

Quelle: CrUX-Dashboard
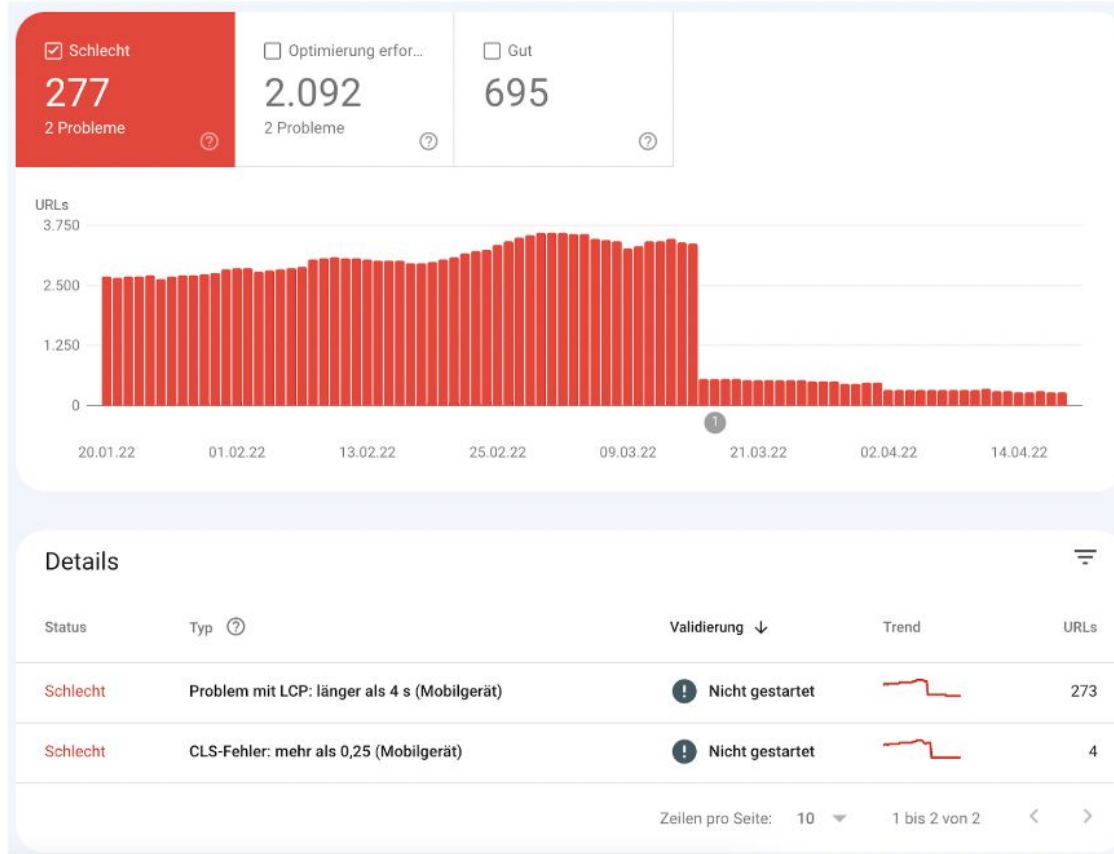
Depending on the optimisation, certain data types showed a positive development.
Others rather a wavelike one.
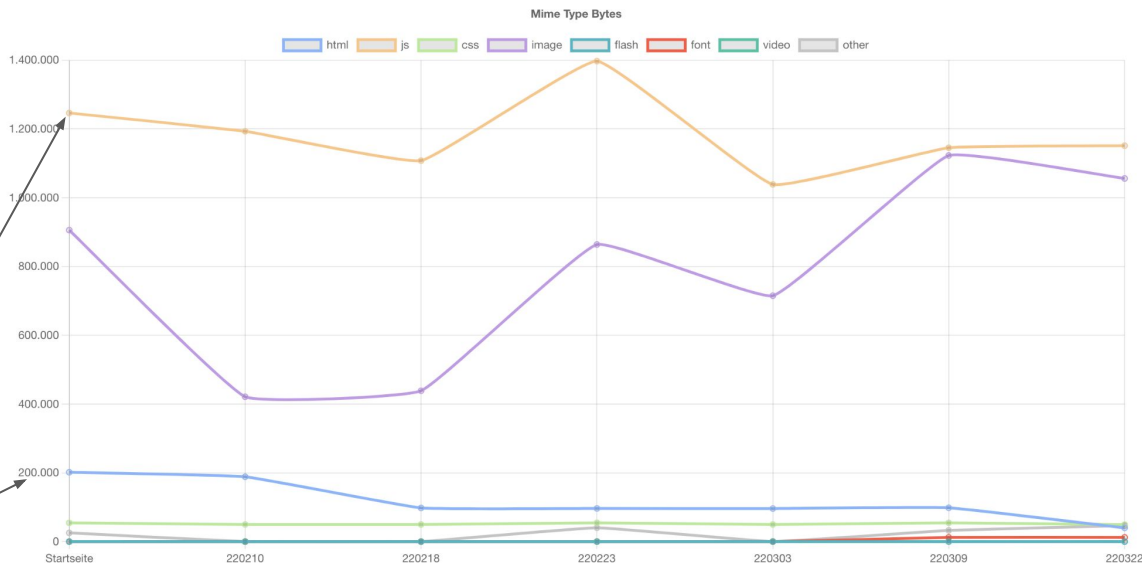
JavaScript and HTML resources were successfully reduced.

Source: own visualisation

Mime Type Bytes

Legend: html, js, css, image, flash, font, video, other

MIME Type Bytes	html	js	css	image	flash	font	video	other
Startseite	201,612	1,246,441	54,532	905,857	0	0	0	25,383
220210	188,523	1,193,425	49,782	421,201	0	0	0	260
220218	97,948	1,107,992	49,782	438,626	0	0	0	260
220223	96,433	1,397,382	54,538	863,984	0	0	0	40,137
220303	96,146	1,038,724	49,787	715,078	0	0	0	260
220309	98,361	1,145,514	54,538	1,122,876	0	12,288	0	32,511
220322	39,998	1,151,431	49,451	1,056,084	0	12,288	0	46,232

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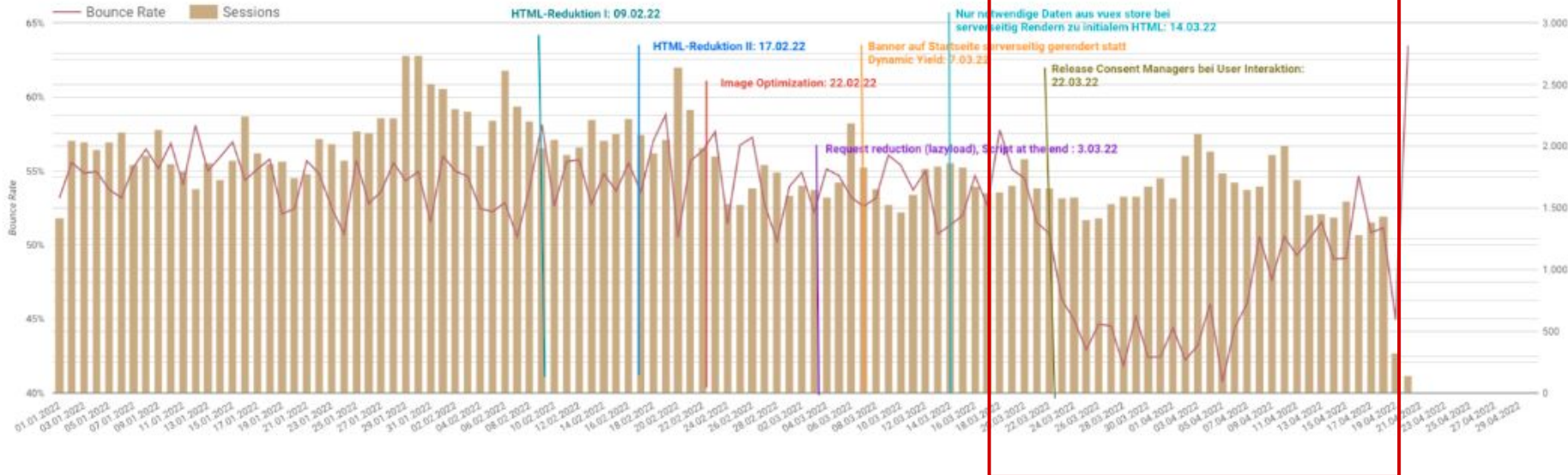
Of the average page visit duration for optimised category pages

Category: https://www.roastmarket.de/kaffeemaschinen.html
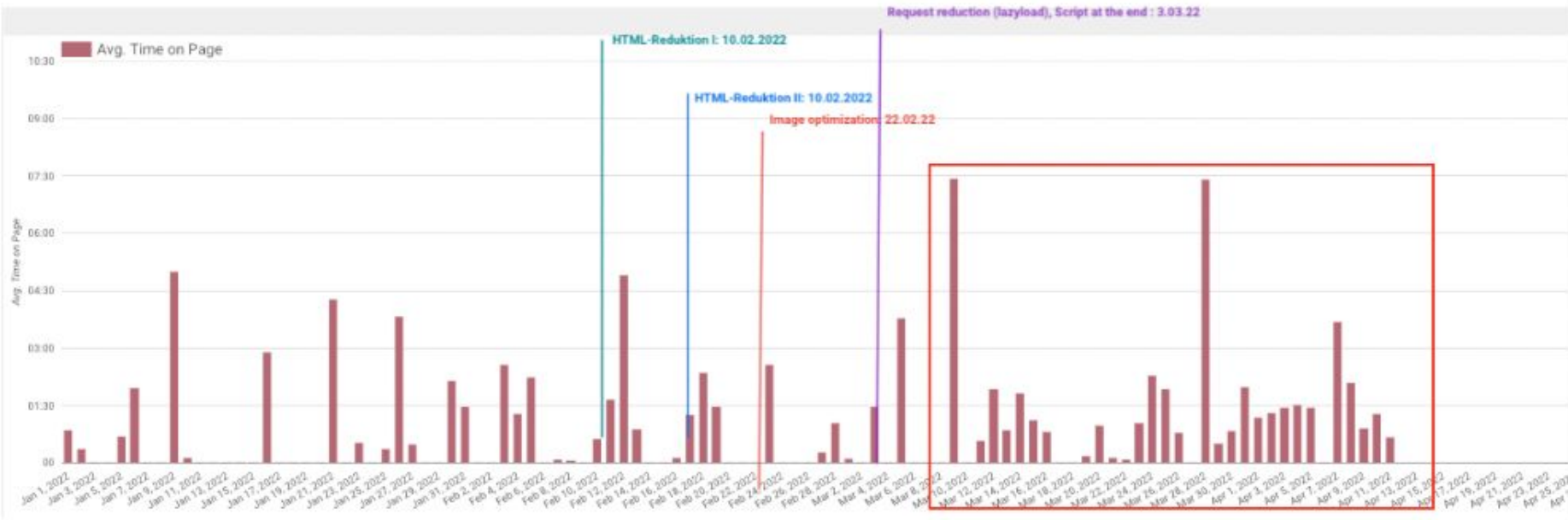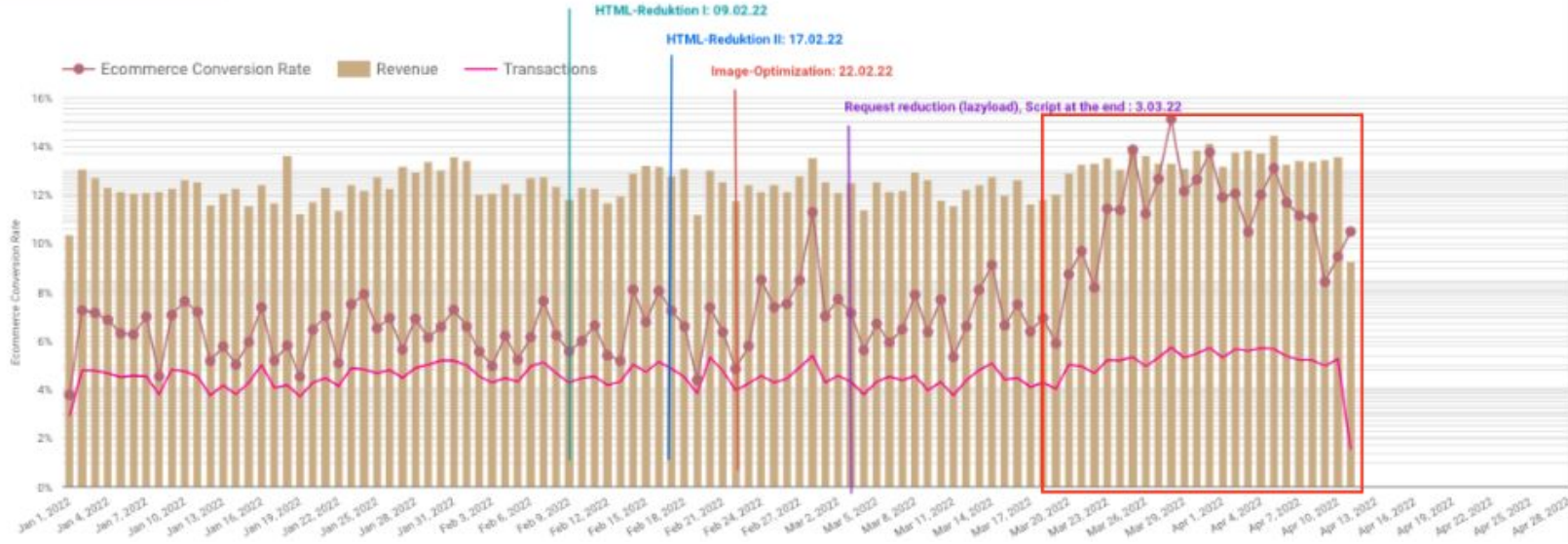
Monat Jahr ▾	Ecommerce Conversi...	Monat Jahr ▾	Ecommerce Conversi...
Apr 2022	11.32%	Jun 2021	4.57%
Mar 2022	9.09%	May 2021	4.9%
Feb 2022	6.25%	Apr 2021	5.24%
Jan 2022	6.42%	Mar 2021	7.44%

Which is not due to seasonal effects.

IMPROVEMENT

Increase in Sistrix visibility with marker B as the end point of the optimisation measures

Source: Sistrix

The loading times were compared for the Largest Contentful Paint from www.roastmarket.de/ and

a) www.coffeecircle.com/, because it is a competitor in the industry, and

b) www.tally-wejil.com/de_DE/ due to the use of the same CMS.
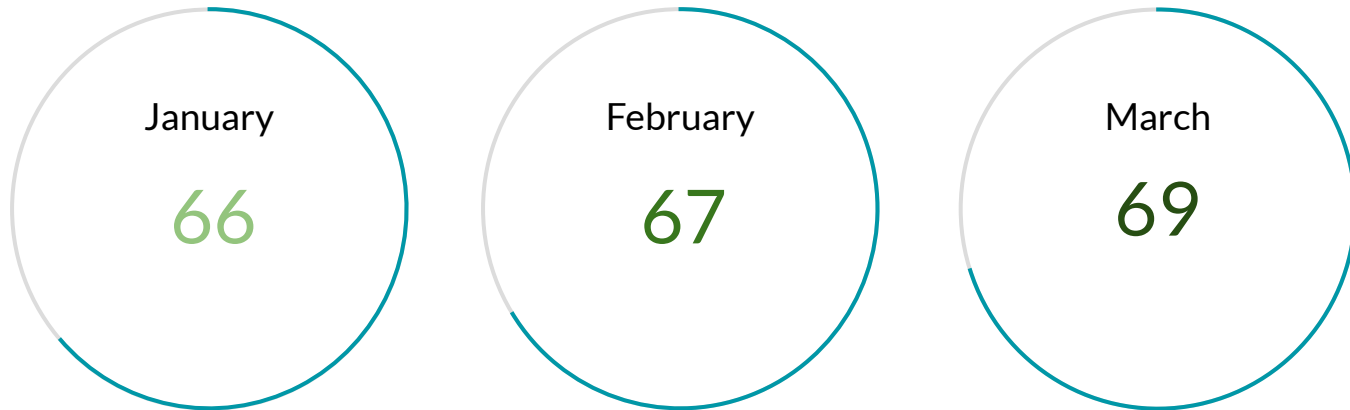
Here, **roast**market.de was in first place in April 2022, after optimisation, and has thus overtaken competitor coffeecircle.com.

Users were surveyed about their shopping experience via Zenloop after checkout. The overall Net Promoter Score changed from:

January	February	March
66	67	69

KEY RESULTS

Web performance as an integrative process beyond pure performance optimisation

PROCESS-ESTABLISHMENT

Establishment of internal processes to monitor web performance in the future

✓

KNOWLEDGE-GAINS

A better understanding by web developers of optimisation opportunities and their effects

✓

IMPROVEMENT USER EXPERIENCE

A measurably better page perception for users

✓

roastmarket

THE BOUTIQUE AGENCY

THANK YOU!

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