

Textual Love
Text Analysis on Facebook Messenger Data

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SAS



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Health & Fitness

PERFECT!

LIFE SPAR

Excellence

To the rescue

Favorable

Clear, calm message

Distinguished by dedication

A bright idea

Soar

Serenity

Just perfect

Having fun

More good news in economy

50% OFF

friendship

Opportunity award

lovin' it

worst may be behind us

joy

awe

amazing

stunning

breathtaking

phenomenal

incredible

unbelievable

mind-blowing

heartwarming

inspiring

motivating

empowering

transformative

game-changing

cutting-edge

state-of-the-art

groundbreaking

revolutionary

innovative

creative

imaginative

visionary

pioneering

trailblazing

groundbreaking

revolutionary

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pioneering

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pioneering

trailblazing

groundbreaking

revolutionary

innovative

creative

imaginative

visionary



Having fun

Just perfect

Health & Fitness

Excellence

LOOKING

Favorable

PERFECT!

LIFE SPAR

Victories

Great ex...

GOOD

Soar

triumphant

WIN

PER

content

A bright idea

news in

PERFECT!

To the rescue

award

50% OFF

delighted

honor

good of days

freedom

return on

economy

PROGRESS

Clear, calm message

live like kings

queaky clean

friendship

perfect

LOOKING

Distinguished by dedication

joy

PERFECT!

Ready to get busy

50% OFF

GOOD

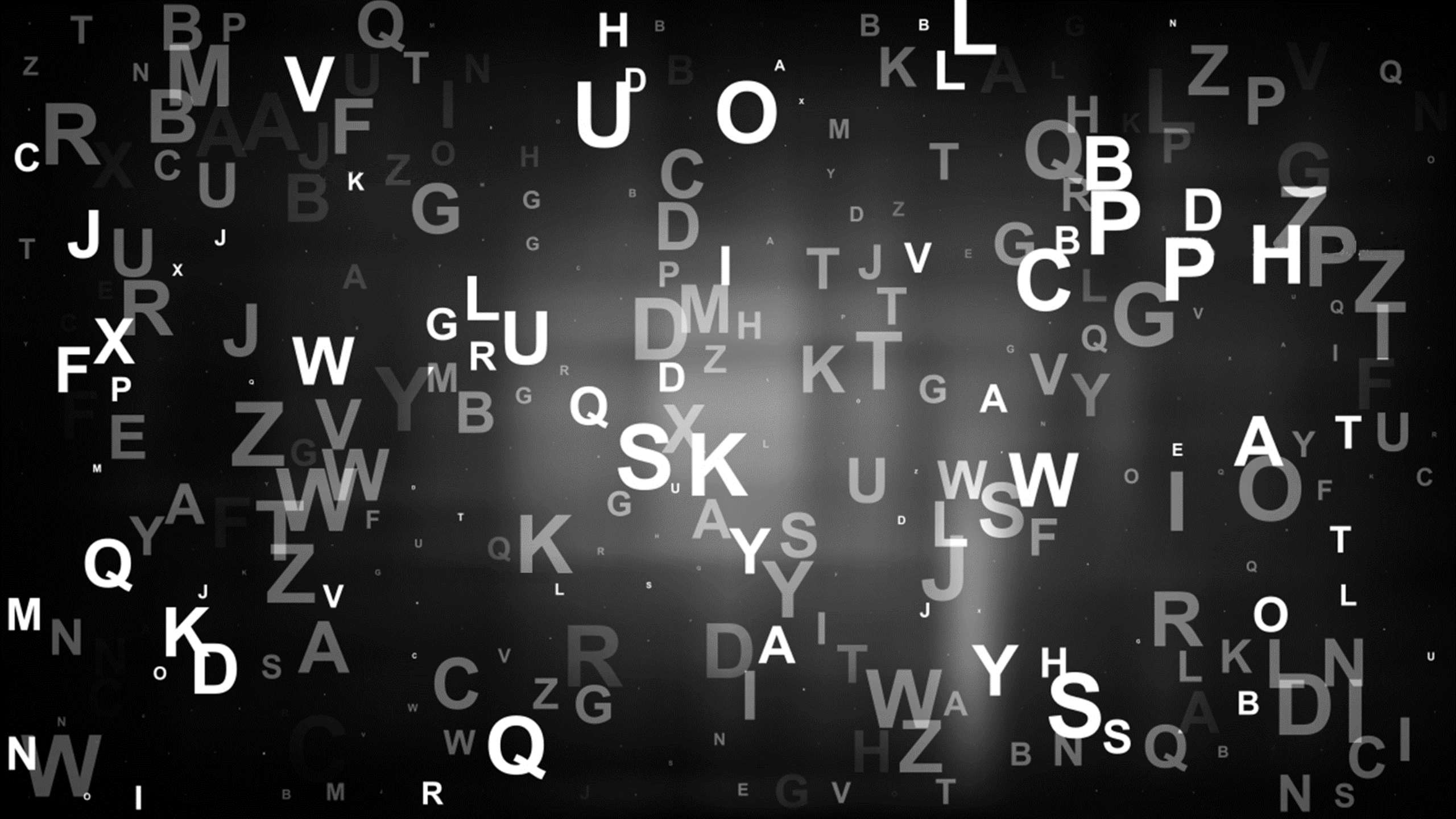
Christmas

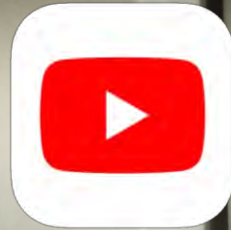
worst may be behind us

To the rescue

award

50% OFF





Cyberbullying





Terror

Love



Download Your Information

You can download a copy of your Facebook information at any time. You can download a complete copy, or you can select only the types of information and date ranges you want. You can choose to receive your information in an HTML format that is easy to view, or a JSON format, which could allow another service to more easily import it.

Downloading your information is a password-protected process that only you will have access to. Once your copy has been created, it will be available for download for a few days.

If you'd like to view your information without downloading it, you can [Access Your Information](#) at any time.

When you download your information your download won't include information that someone else shared, like another person's photos that you're tagged in.

You can still view this information anytime.

[Learn more](#)

Select file options

You can choose the file format, media quality and date range for your download. HTML format is easy to view while JSON format allows another service to more easily import the file. Media quality is the quality of your photos and videos but also affects file size.

Format
JSON

Media quality
High

Date range (required)
All time

Select information to download

You can download everything or select the types of information you want to download.

Your activity across Facebook

[Deselect All](#)

Information and activity from different areas of Facebook, such as posts you've created, photos you're tagged in, groups you belong to and more

- Saved items and collections**
A list of the posts you've saved, and your activity within collections
[What's included?](#)
- Voting location and reminders**
Location and preferences in Town Hall and the Voting Information Center
[What's included?](#)
- Messages**
Messages you've exchanged with other people on Messenger
[What's included?](#)
- Posts**





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FOR LEARNERS



Editing

Data

FINAL_SOEREN

Filter

+ New data item

Suggest

Category

- content - 13K
- ip - 155
- Num - 2
- sas_Date - 2K
- sas_DateTime - 18K
- sas_Time - 16K
- sender_name - 2
- sender_name (1) - 2
- type - 3

Measure

- call_duration
- Frequency
- id
- is_unsent
- missed

Textual Love

Messages Messages by Date Messages by Sender Word Cloud with Love Keywords Love Concept by Date Love Concept by Sender

Drag data items or objects here.

Textual Love

Editing

Data

FINAL_SOEREN

Filter

+ New data item

Category

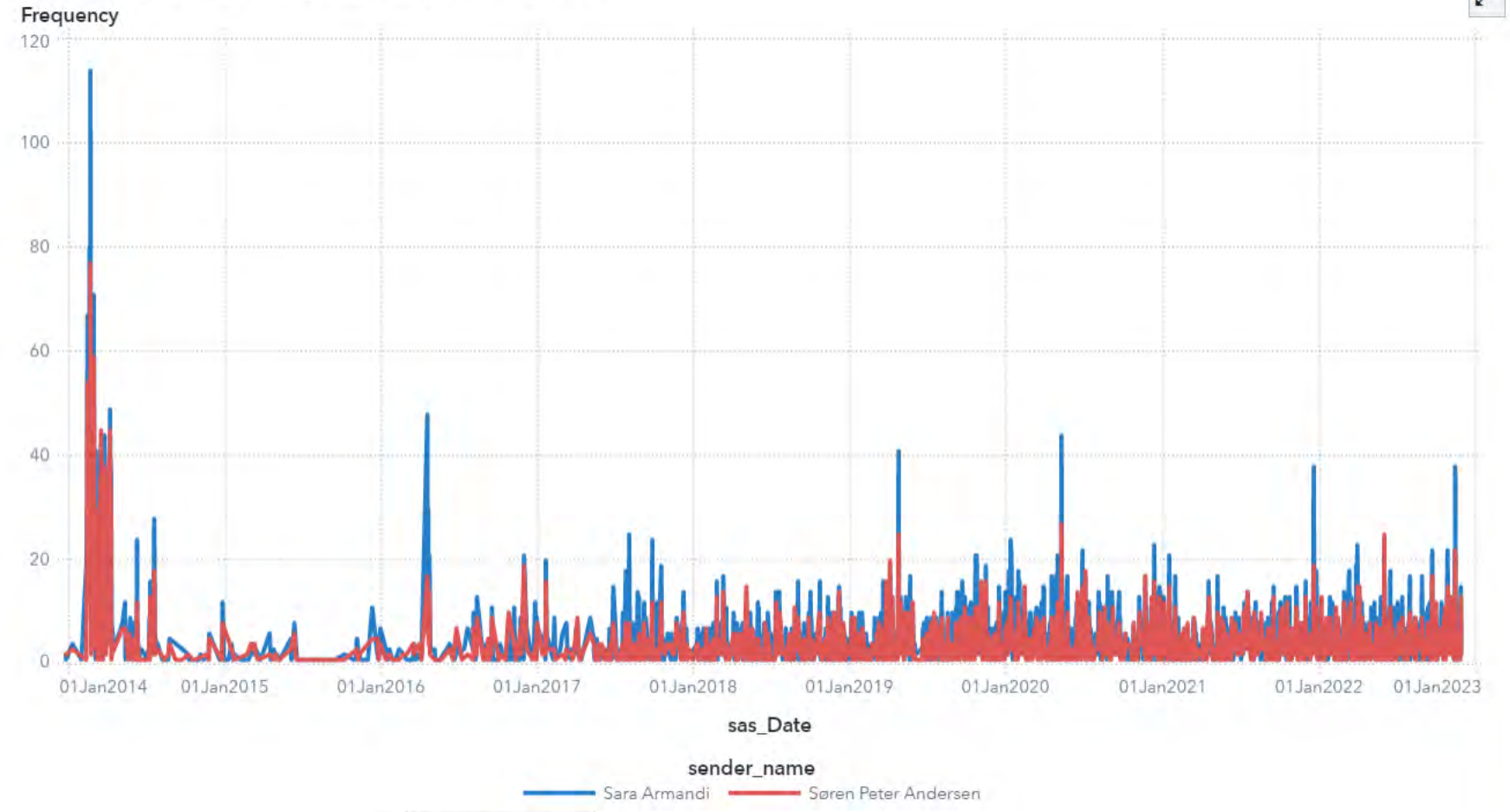
- content - 13K
- ip - 155
- Num - 2
- sas_Date - 2K
- sas_DateTime - 18K
- sas_Time - 16K
- sender_name - 2
- sender_name (1) - 2
- type - 3

Measure

- call_duration
- Frequency
- id
- is_unsent
- missed

- Messages
- Messages by Date
- Messages by Sender
- Word Cloud with Love Keywords
- Love Concept by Date
- Love Concept by Sender

Frequency of sas_Date grouped by sender_name



- Options
- Roles
- Actions
- Rules
- Filters
- Ranks



Projects

Search Select all



Messages Text

Text Analytics

Modified by: Sara.Armandi@sas.com
Date modified: Dec 30, 2023, 12:09:41



New Project

New Project

Name: *

Type: *

Template:

Data: *

Project language: *

Description:

Messages Text

Data Pipelines

Data sources

Project data table

- FINAL_SOEREN

Variable Name	Type	Role	Display Variable
<input type="checkbox"/> __uniqueid__	Numeric	Key	
<input type="checkbox"/> content	Character	Text	✓
<input type="checkbox"/> sender_name	Character	Category	✓
<input type="checkbox"/> call_duration	Numeric		
<input type="checkbox"/> id	Numeric		✓
<input type="checkbox"/> ip	Character		
<input type="checkbox"/> is_unsent	Numeric		
<input type="checkbox"/> missed	Numeric		
<input type="checkbox"/> Num	Character		
<input type="checkbox"/> sas_Date	Numeric		✓
<input type="checkbox"/> sas_DateTime	Numeric		✓
<input type="checkbox"/> sas_Time	Numeric		
<input type="checkbox"/> type	Character		

FINAL_SOEREN

Columns: 13

Rows: 17,874

Label: (not available)

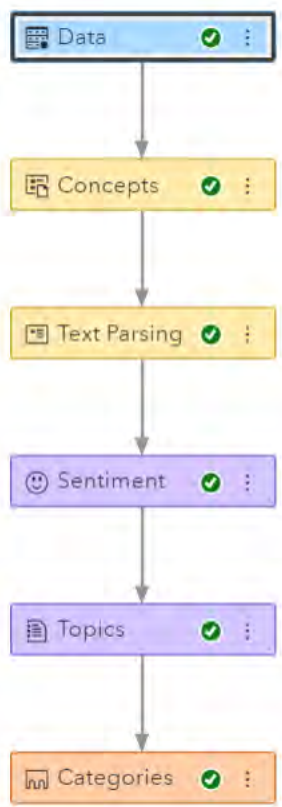
Location: cas-v4e074-default/Analytics_Project_6f76c4c2-042a-4cca-86f7-dcf799a12f3e

Messages Text

Data Pipelines

Pipeline 1 +

Run Pipeline



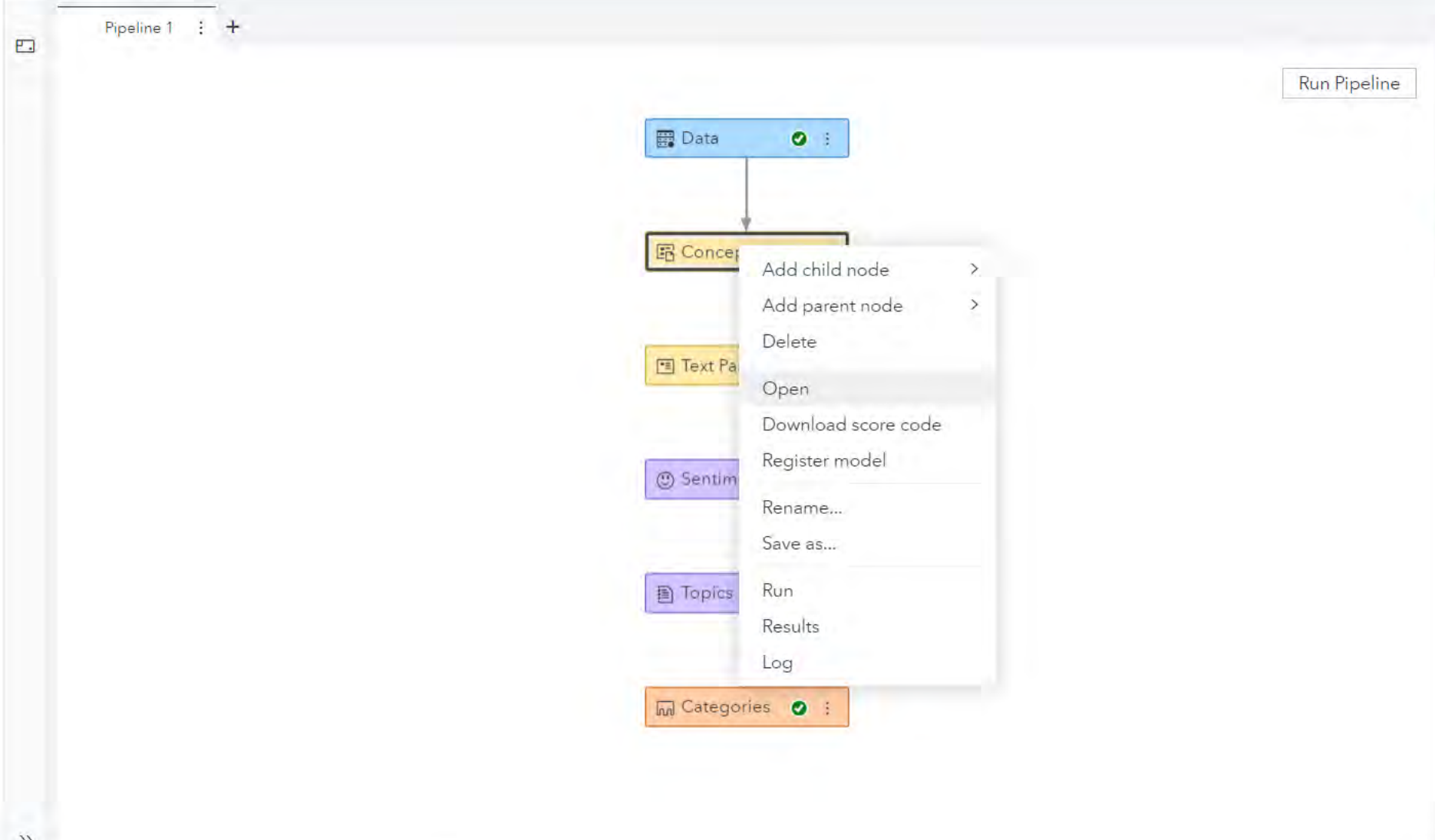
Data

Description:

Prepares the input data for use within the pipeline.

Messages Text

Data Pipelines



Run Pipeline

Concepts

Description:

Extracts specific information from text.

Include predefined concepts

Messages Text > Concepts

Run Node Close

Edit Concept Sandbox

Concepts

Predefined Concepts (8)

- nlpDate
- nlpMoney
- nlpNounGroup
- nlpOrganization
- nlpPercent
- nlpPerson
- nlpPlace
- nlpTime

Custom Concepts (2)

- Boys
- Love

```

1 CONCEPT:elske@
2 CLASSIFIER:elskede
3 CLASSIFIER:love you
4 CLASSIFIER:amo
5 CLASSIFIER:quiero
6 CONCEPT:du er dejlig@
7 CLASSIFIER:dejligste
8 CONCEPT:du er sød@
9 CLASSIFIER:sødeste
10 CLASSIFIER:kys
11 CLASSIFIER:<3

```

Code is valid

Documents Test Sample Text

All (17874) Matched (1450 of 17874) Search

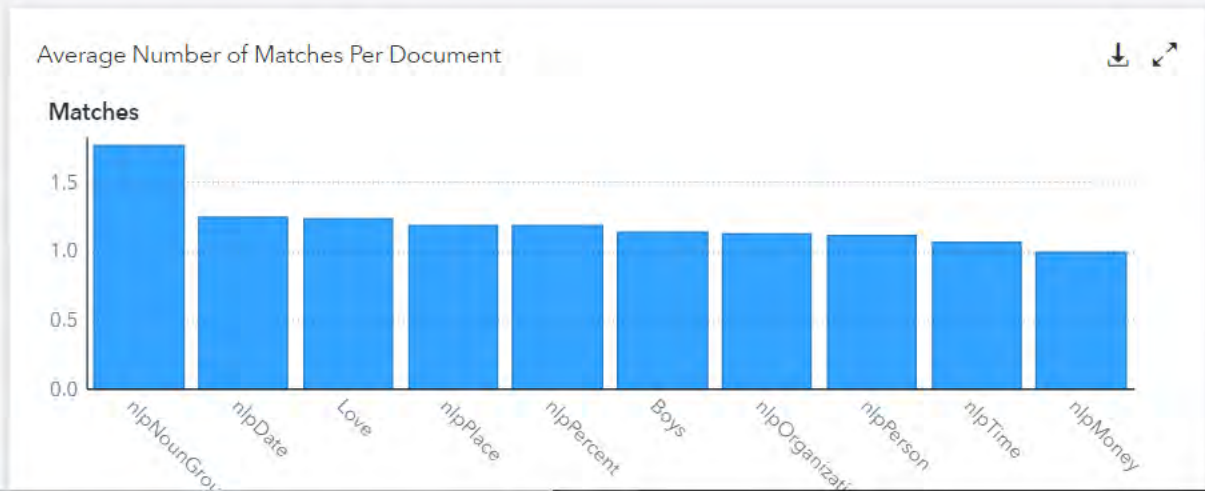
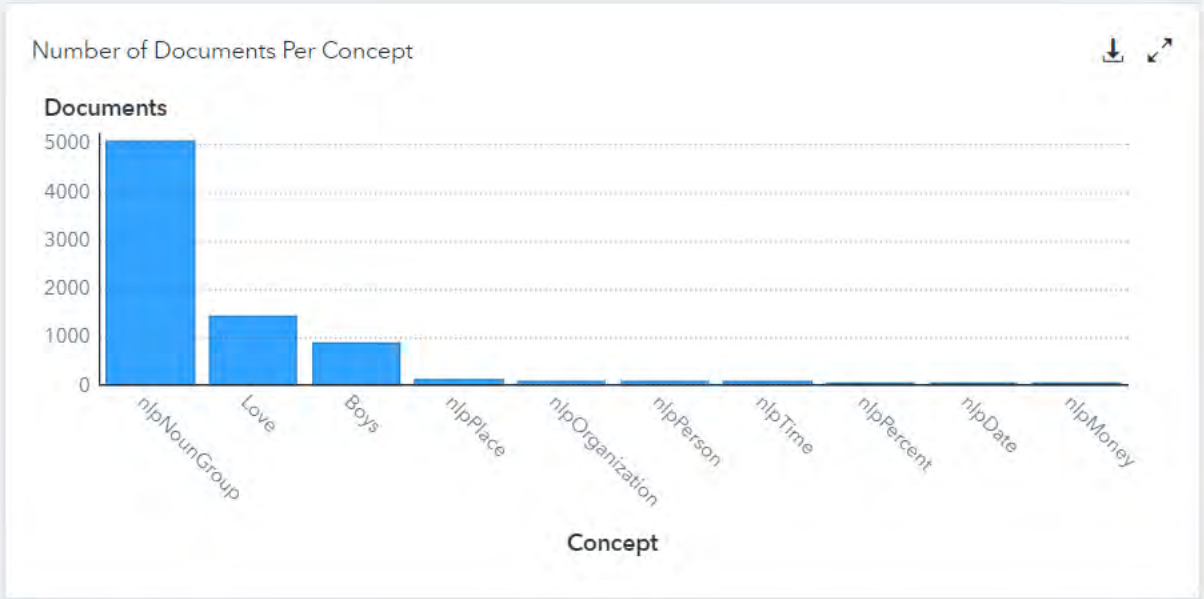
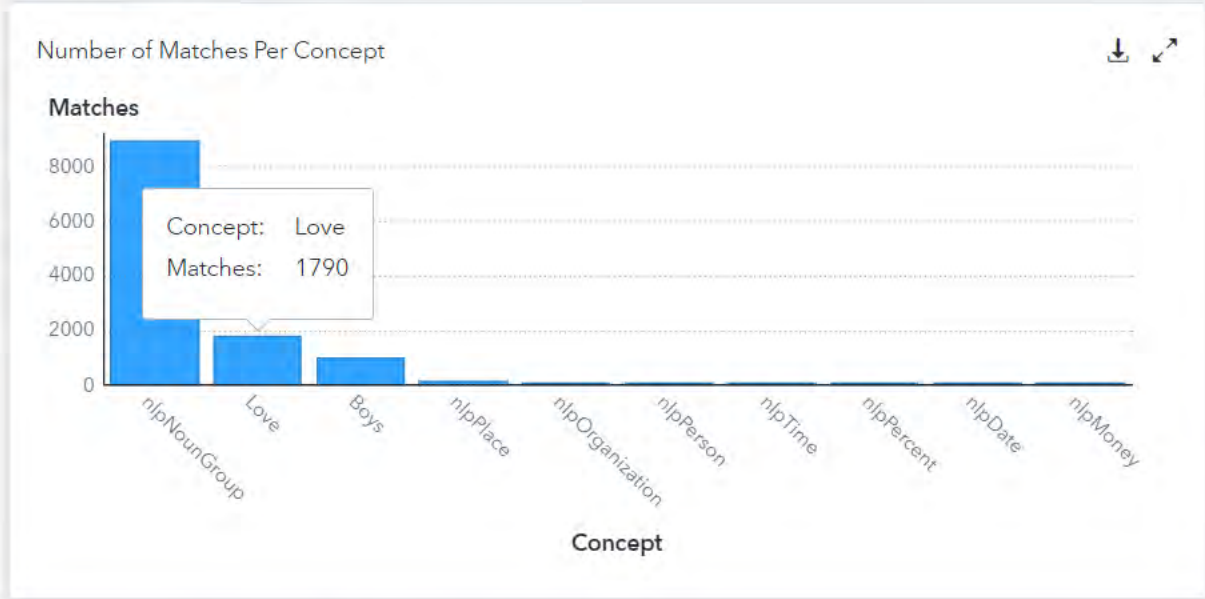
content	Fact M...	id	sas_D...
kys	0	4176	06SEP2017
...den næste uge. Kys på dig	0	5016	23MAR2018
Kvs	0		05DEC2

Document 1 of 1450

Highlight: Concepts matches Search matches

Messages Text > "Concepts" Results

Summary Output Data



Concepts Score Code

```
1 /*****  
2 * SAS Visual Text Analytics  
3 * Concepts Score Code  
4 *  
5 * Modify the following macro variables to match your needs.  
6 * The liti_binary_caslib and liti_binary_table_name variables  
7 * should have already been set to the location of the concepts  
8 * binary table for the associated SAS Visual Text Analytics project.  
9 *****/  
10  
11 /* specifies CAS library information for the CAS table that you would  
12 %let input_caslib_name = "{input_caslib_name}";
```

Textual Love

Editing

Data

MESSAGES TEXT_CONCEPTS_TRAN...

Filter

+ New data item

Suggest

Category

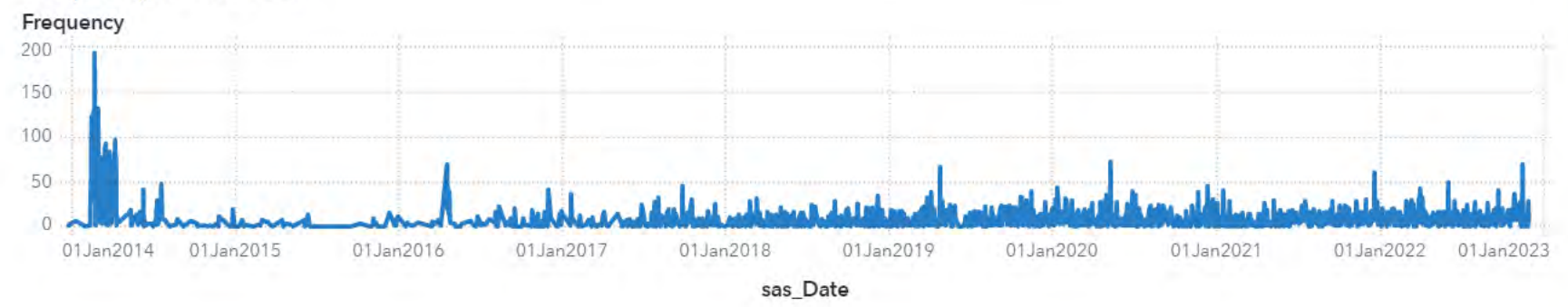
- Concept Name - 11
- Concept Type - 2
- content - 13K
- Full Path - 11
- ip - 155
- Keywords - 4.2K
- Num - 2
- sas_Date - 2K
- sas_DateTime - 18K
- sas_Time - 16K
- sender_name - 2
- type - 3

Measure

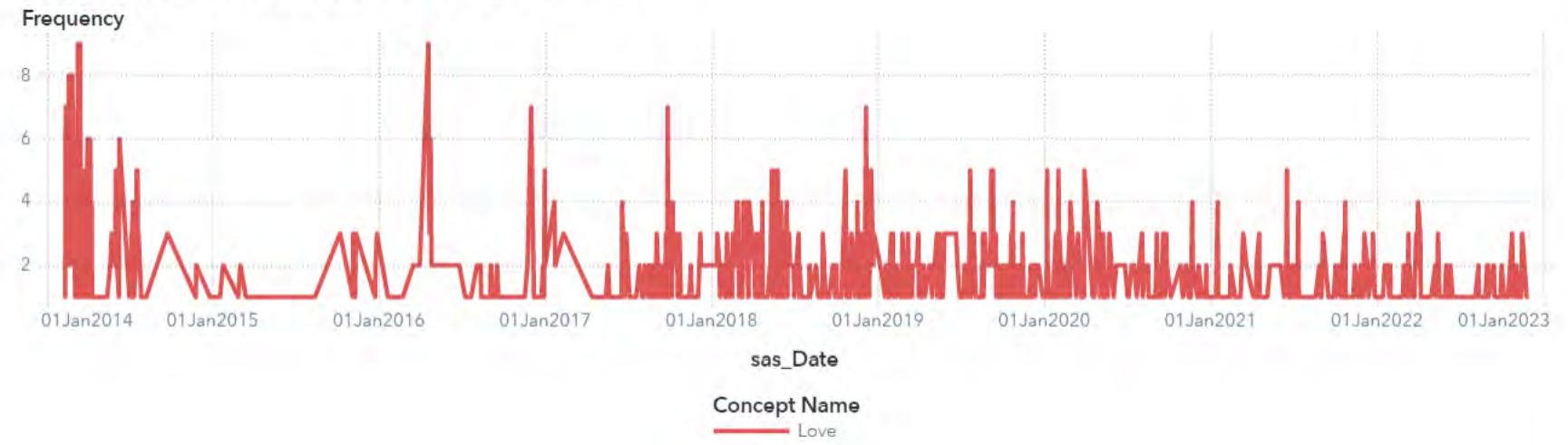
- __uniqueid__
- call_duration
- Frequency

- Messages
- Messages by Date
- Messages by Sender
- Word Cloud with Love Keywords
- Love Concept by Date
- Love Concept by Sender

Frequency of sas_Date



Frequency of sas_Date grouped by Concept Name



Messages Text > Text Parsing - Manage Terms

Run Node Close

Kept Terms (2275)

<input type="checkbox"/>	Term	Role	Documents	Frequency ↓
<input type="checkbox"/>	▸ jeg	PRO	3878	5463
<input type="checkbox"/>	▸ du	PRO	3186	3817
<input type="checkbox"/>	▸ er	V	3066	3615
<input type="checkbox"/>	▸ have	V	2343	2896
<input type="checkbox"/>	▸ være	V	2294	2531
<input type="checkbox"/>	ð	N	1981	2151
<input type="checkbox"/>	▸ vi	PRO	1599	1961
<input type="checkbox"/>	▸ dig	N	1442	1640

Dropped Terms (10584)

<input type="checkbox"/>	Term	Role	Documents	Frequency ↓
<input type="checkbox"/>	i	PPOS	2948	3957
<input type="checkbox"/>	og	CONJ	2552	3542
<input type="checkbox"/>	▸ den	DET	2656	3398
<input type="checkbox"/>	at	CONJ	1879	2392
<input type="checkbox"/>	så	ADV	2010	2385
<input type="checkbox"/>	til	PPOS	1870	2270
<input type="checkbox"/>	ikke	ADV	1772	2054
<input type="checkbox"/>	på	PPOS	1671	1943

Documents

All (17874) Matched

content	id	sas_D...	sas_D...
Han drømmer om at drikke kaffe	7875	22JUL2019	22JUL19:12:24:22
Hvordan går det?	8400	25SEP2019	25SEP19:12:39:31
Skal jeg tage noget mad med hjem til dig?		14NOV2	14NOV19:15:00

Messages Text > Text Parsing - Manage Terms

Run Node Close

Kept Terms (2)

Term	Role	Documents	Frequency
<input type="checkbox"/> elsker	Love	483	488
<input type="checkbox"/> elsk	N	6	6

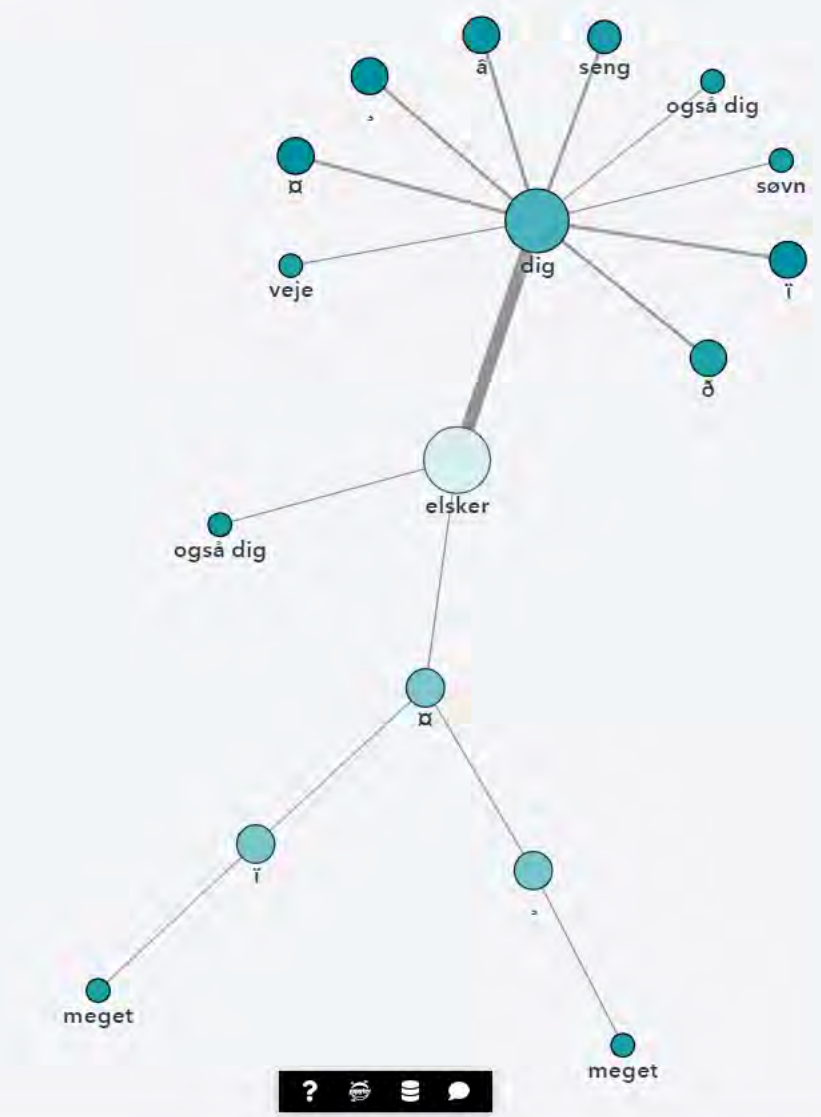
Dropped Terms (10584)

Term	Role	Documents	Frequency
<input type="checkbox"/> i	PPOS	2948	3957
<input type="checkbox"/> og	CONJ	2552	3542
<input type="checkbox"/> den	DET	2656	3398
<input type="checkbox"/> at	CONJ	1879	2392
<input type="checkbox"/> så	ADV	2010	2385
<input type="checkbox"/> til	PPOS	1870	2270
<input type="checkbox"/> ikke	ADV	1772	2054
<input type="checkbox"/> på	PPOS	1671	1943

Documents

All (17874) Matched

content	id	sas_D...	sas_D...
Han drømmer om at drikke kaffe	7875	22JUL2019	22JUL19:12:24:22
Hvordan går det?	8400	25SEP2019	25SEP19:12:39:31
Skal jeg tage noget mad med hjem til dig?		14NOV2	14NOV19:15:00



Messages Text > Text Parsing - Manage Terms

Run Node Close

Kept Terms (2275)

Similarities for the term "elsker"

Term	Similarity	Role	Documents	Frequency
<input checked="" type="checkbox"/> elsker	1.000	Love	483	488
<input type="checkbox"/> kys	0.475	N	5	5
<input type="checkbox"/> digø	0.380	N	9	9
<input type="checkbox"/> længe	0.364	N	6	6
<input type="checkbox"/> nej	0.338	PN	6	6
<input type="checkbox"/> fly	0.323	V	10	10
<input type="checkbox"/> jeg	0.288	N	7	7

Dropped Terms (10584)

Term	Role	Documents	Frequency
<input type="checkbox"/> i	PPOS	2948	3957
<input type="checkbox"/> og	CONJ	2552	3542
<input type="checkbox"/> den	DET	2656	3398
<input type="checkbox"/> at	CONJ	1879	2392
<input type="checkbox"/> så	ADV	2010	2385
<input type="checkbox"/> til	PPOS	1870	2270
<input type="checkbox"/> ikke	ADV	1772	2054
<input type="checkbox"/> på	PPOS	1671	1943

Documents

All (17874) Matched

content	id	sas_Date	sas_Dat...
Han drømmer om at drikke kaffe	7875	22JUL2019	22JUL19:12:24:22
Hvordan går det?	8400	25SEP2019	25SEP19:12:39:31
Skal jeg tage noget mad med hjem til dig?	8924	14NOV2019	14NOV19:15:00:55

Log for Node "Sentiment"

Find

⊗ Errors (0) ⚠ Warnings (0) ℹ Notes (5)

There are no messages.

NOTE: 2022-12-30T10:22:41.321 - Executing the task "sentiment".
NOTE: 2022-12-30T10:22:41.530 - A default sentiment model does not exist for the language "DANISH".
NOTE: 2022-12-30T10:22:41.684 - The metadata was updated.
NOTE: 2022-12-30T10:22:41.684 - The task "sentiment" was completed successfully.
NOTE: 2022-12-30T10:22:41.684 - The log is being attached to the job.

[Download log](#)

Close

Messages Text > Topics

Run Node Close

Topics (15)

Topic	Created by	Documents ↓
<input type="checkbox"/> +elsker	User	3415
<input type="checkbox"/> +jeg, +komme, +have, +tro, +hente	System	2380
<input type="checkbox"/> +du, +have, +komme, +sendt, +fil	System	1898
<input type="checkbox"/> +er, +du, +god, +jeg, +sød	System	1857
<input type="checkbox"/> +vi, +have, +se, +køre, +spise	System	1556
<input type="checkbox"/> +være, +lang, +god, max, kl	System	1486
<input checked="" type="checkbox"/> +dig, +elsker, kys, +jeg, +du	System	1384
<input type="checkbox"/> +sove, +han, max, +god, +have	System	1285

Terms

All Matched Filter

Term	Role	Documents	Frequency ↓
<p>No term data was found.</p>			

Documents

All (17874) Matched (1384 of 17874) Search

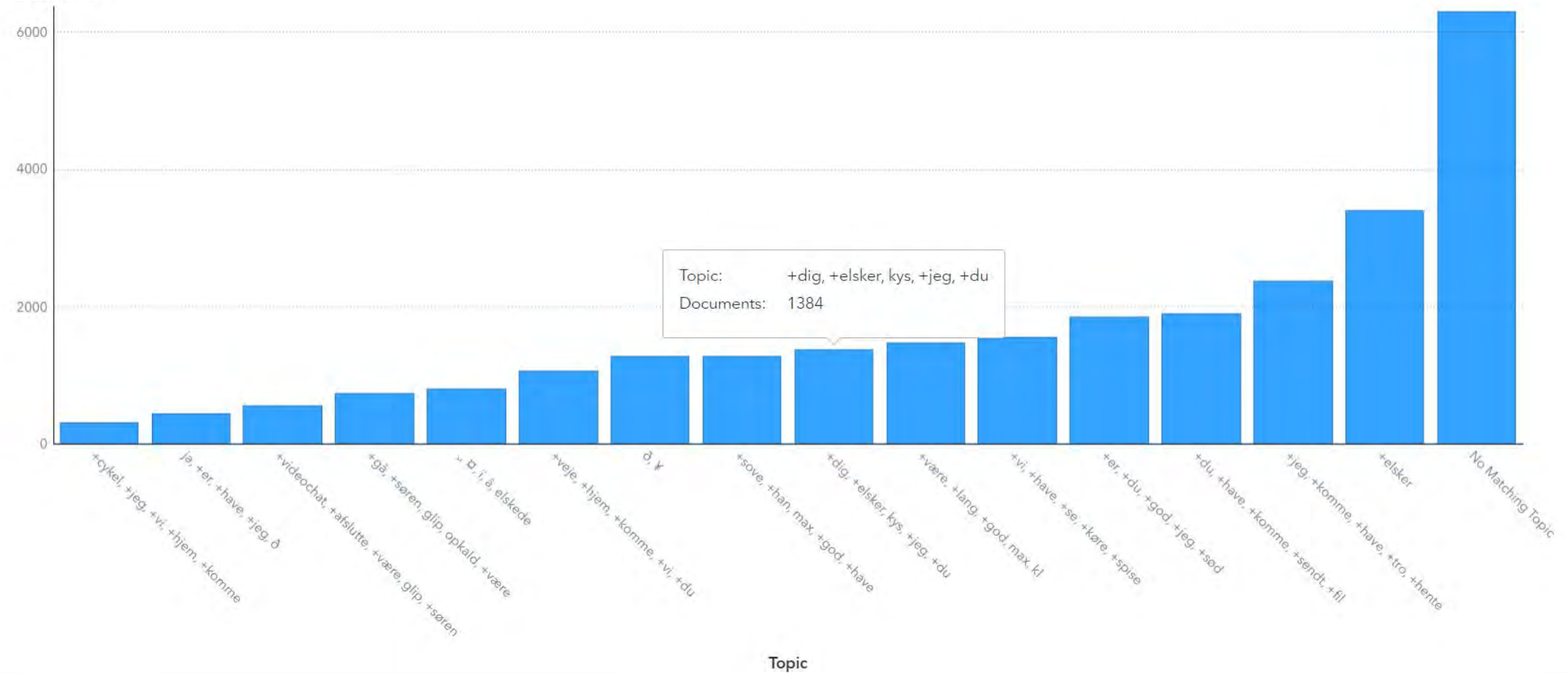
content	Rele... ↓	id	sas_D...
Elsker dig!	0.871	8534	10OCT2019
Elsker dig!	0.871	9000	26NOV2019
Flsker dig!	0.871		22APR2

Document 1 of 1384

Highlight: Topic matches Search matches

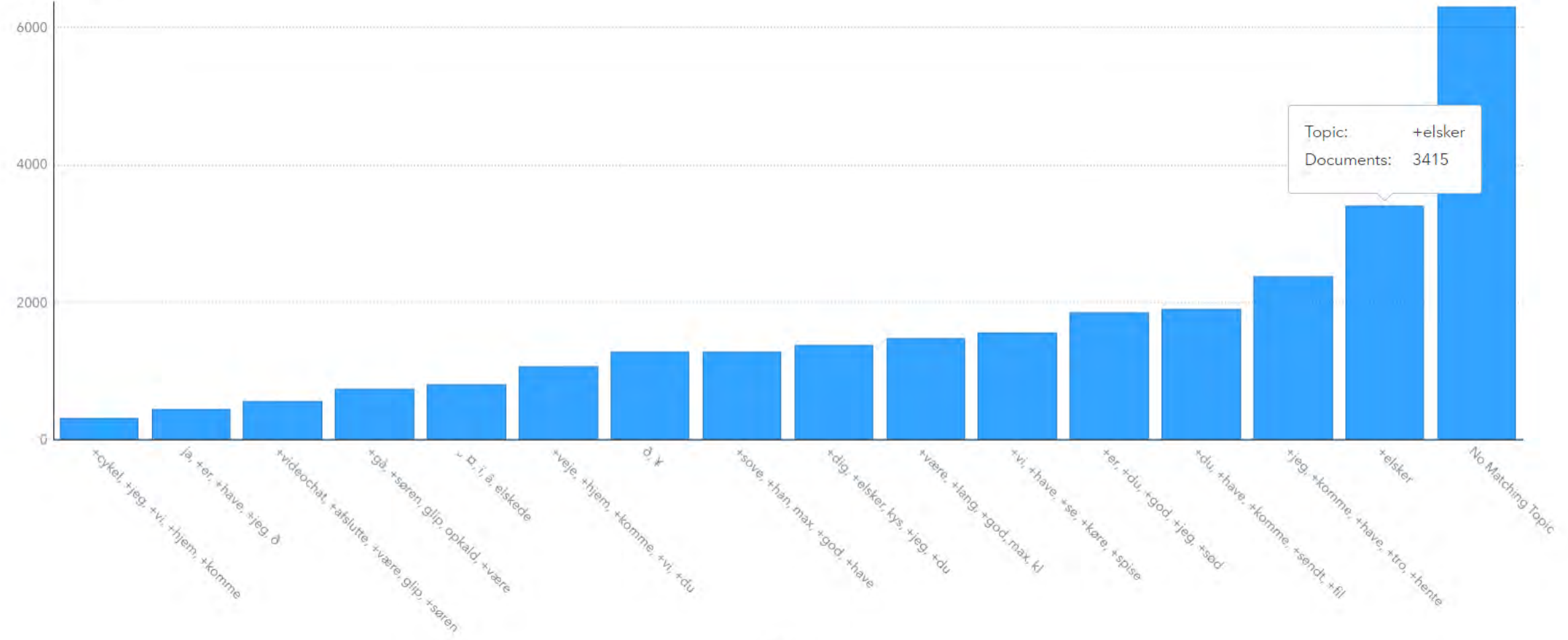
Number of Documents Per Topic

Documents



Number of Documents Per Topic

Documents



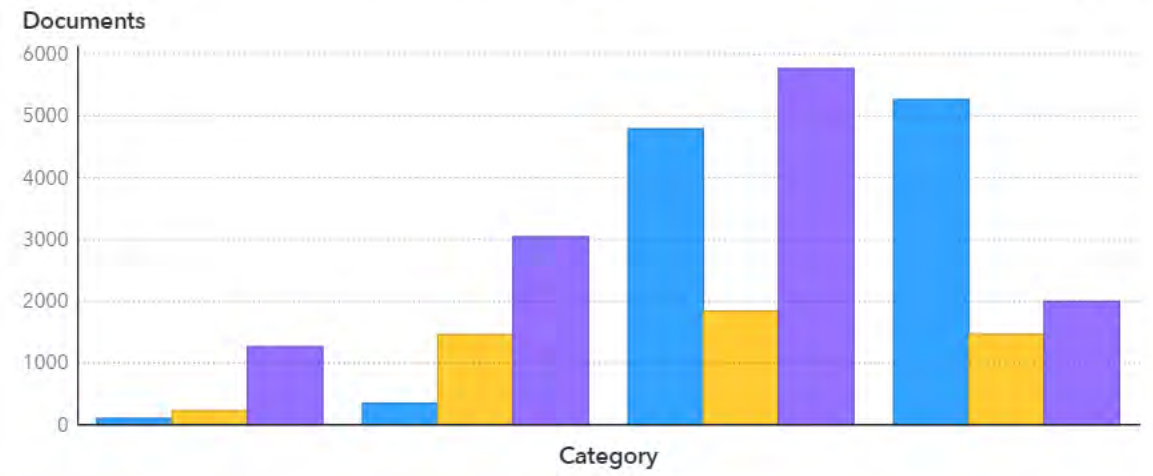
Topic: +elsker
Documents: 3415

Topic

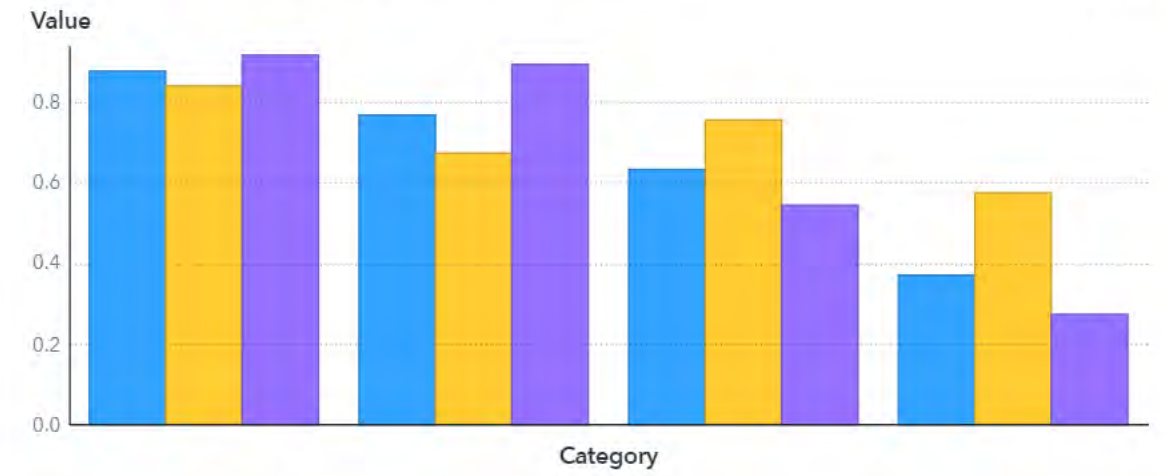
Messages Text > "Categories" Results

Summary Output Data

Diagnostic Counts for Automatically Generated Categories



Diagnostic Metrics for Automatically Generated Categories



Categories Score Code

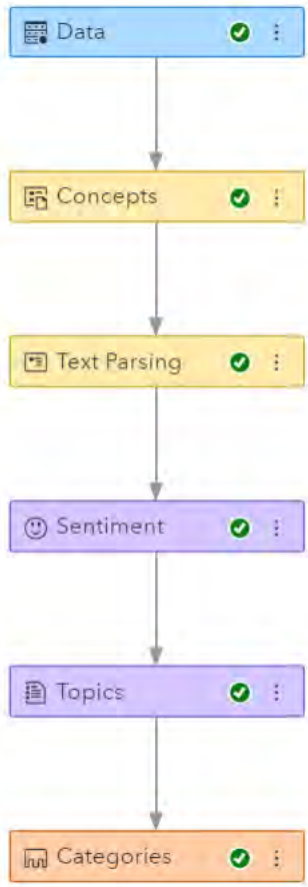
```
1 /*****  
2 * SAS Visual Text Analytics  
3 * Categories Score Code  
4 *  
5 * Modify the following macro variables to match your needs.  
6 *****/  
7  
8 /* specifies CAS library information for the CAS table that you would  
9 %let input_caslib_name = "{input_caslib_name}";  
10  
11 /* specifies the CAS table you would like to score. You must modify th  
12 %let input_table_name = "{input_cas_table_name}";
```


Messages Text

Data Pipelines

Pipeline 1 +

Run Pipeline



Options
Select a node to view or edit its properties.

Love

