# thelook

**IVAN SUDIBYO** 







"The journey of a thousand miles begins with a single step"

**—LAO TZU** 

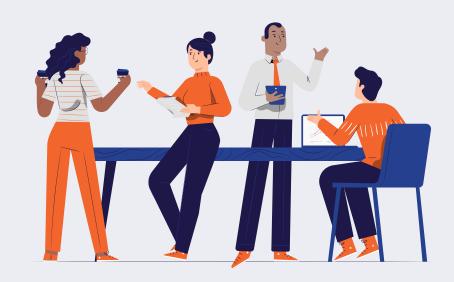


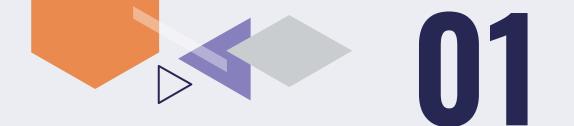


## ABOUT US THELOOK

### OUR COMPANY

thelook has been known as a leading fashion e-commerce brand.







Field name	Туре	Mode
status	STRING	NULLABLE
month	INTEGER	NULLABLE
year	INTEGER	NULLABLE
revenue	FLOAT	NULLABLE
order_count	INTEGER	NULLABLE
customers_order	INTEGER	NULLABLE

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SCHE	MA DETAILS	PREVIEW				
Row	status	month	year	revenue	order_count	customers
1	Shipped		1 2019	114.949996	3	3
2	Shipped		2 2019	2298.22999	22	22
3	Shipped		3 2019	4590.60999	50	50
4	Shipped		4 2019	4507.46000	56	50
5	Shipped		5 2019	8415.30998	82	8
6	Shipped		6 2019	6858.50003	104	104
7	Shipped		7 2019	9081.89000	127	125
8	Shipped		8 2019	12619.1699	146	144
9	Shipped		9 2019	16863.0999	195	195
10	Shipped	1	0 2019	16842.5899	201	201

	year	Values						
	2019		2020		2021		2022	
		SUM of		SUM of		SUM of		SUM of
	SUM of	customers	SUM of	customers_	SUM of	customers	SUM of	customers_
status	revenue	_order	revenue	order	revenue	_order	revenue	order
Cancelled	61.141,13	718,00	230.337,94	2.649,00	478.740,93	5.510,00	643.008,66	7.347,00
Complete	99.393,28	1.206,00	366.252,28	4.133,00	795.297,18	8.996,00	1.066.833,50	12.338,00
Processing	81.376,08	894,00	301.739,55	3.439,00	637.363,93	7.339,00	863.725,20	9.910,00
Returned	40.393,16	456,00	163.375,28	1.802,00	303.998,21	3.574,00	425.883,39	4.796,00
Shipped	127.162,31	1.463,00	438.661,15	5.045,00	951.980,90	10.925,00	1.298.629,92	14.899,00

#### link\_spreadsheet

- The revenue complete value has grow every year
- The returned value has grow every year



∓ Fi	ilter Enter property n	ame or value	
	Field name	Туре	Mode
	month	INTEGER	NULLABLE
	year	INTEGER	NULLABLE
	revenue	FLOAT	NULLABLE
	order_count	INTEGER	NULLABLE
	customers_order	INTEGER	NULLABLE
	AOV	FLOAT	NULLABLE
	Frequencies	FLOAT	NULLABLE

Row	month	year		revenue	order_count	customers	AOV	Frequencies
1		1	2019	234.409998	6	6	39.0683331	1.0
2		2	2019	1135.15001	13	13	87.3192319	1.0
3		3	2019	1845.28000	29	29	63.6303449	1.0
4		4	2019	4154.41999	55	55	75.5349090	1.0
5		5	2019	5051.30001	74	73	68.2608110	1.01369863
6		6	2019	7359.36999	89	88	82.6895504	1.01136363
7		7	2019	9007.07998	107	107	84.1783176	1.0
8		8	2019	13034.0100	147	145	88.6667349	1.01379310
9		9	2019	12771.0599	155	154	82.3939354	1.00649350

<u>02\_link</u>

				SUM of Frequencies S	
2019	1	6	39,07	1,00	234,41
	2	13	87,32	1,00	1.135,15
	3	29	63,63	1,00	1.845,28
	4	55	75,53	1,00	4.154,42
	5	73	68,26	1,01	5.051,30
	6	88	82,69	1,01	7.359,37
	7	107 145	84,18 88.67	1,00	9.007,08
	9	154	82,39		13.034,01
	10	154	83,08	1,01 1,01	12.771,06 13.044,01
	10	187		1,01	
	12	193	86,89 79.94	1,01	16.249,13
2020	12	219	79,94 86,09	1,01	15.508,06 18.853,51
2020	2	232	94,83	1,00	21.999,78
	3	283	100,14	1,00	28.338,69
	4	251	85,83	1,00	21.542,36
	5	341	85,99	1,00	29.323,78
	6	281	95,92	1,00	27.049,36
	7	348	93,82	1,01	32.930,17
	8	363	82,11	1,00	29.887,88
	9	408	89,79	1,01	36.904,45
	10	432	83,08	1,01	36.224,53
	11	462	87,23	1,01	40.560,06
	12	513	82,47	1,01	42.637,71
2021	1	549	90,69	1,01	50.149,67
2021	. 2	516	84,89	1,00	43.886,28
	3	644	89,64	1,00	57.998,04
	4	609	92,75	1,00	56.760,18
	5	637	87,08	1,01	56.081,75
	6	719	87,04	1,01	62.927,49
	7	749	81,33	1,00	61.158,28
	8	811	90,19	1,01	73.683,76
	9	817	86,93	1,01	71.453,53
	10	879	90,81	1,01	80.823,21
	11	1003	85,35	1,01	86.206,36
	12	1063	87,60	1,01	94.168,63
2022	1	1164	89,40	1,01	105.131,50
	2	1148	83,90	1,01	97.570,07
	3	1316	82,80	1,01	109.954,45
	4	1374	87,51	1,01	120.940,85
	5	1467	83,29	1,01	123.351,14
	6	1666	82,75	1,01	138.856,32
	7	1888	87,46	1,02	168.532,30
	8	2315	85,62	1,02	202.496,87



	AVE	RAGE	SUM of
year	of A	VOV	revenue
20	119	76,80	99.393,28
20	20	88,94	366.252,28
20	21	87,86	795.297,18
20	22	85,34	1.066.833,50

#### link spreadsheet





<b>〒 Filter</b> Enter property name or value								
	Field name	Туре	Mode					
	name	STRING	NULLABLE					
	email	STRING	NULLABLE					
	id	INTEGER	NULLABLE					
	order_count	INTEGER	NULLABLE					
	month	INTEGER	NULLABLE					
	year	INTEGER	NULLABLE					

<u>03\_link</u>

SCHE	MA DETAILS	PREVIEW				
Row	name	email	id	order_count	month	year
1	Aaron Cruz	aaroncruz@example.com	18153	1	8	2022
2	Aaron Fry	aaronfry@example.org	84795	1	8	2022
3	Aaron Glenn	aaronglenn@example.net	83289	1	8	2022
4	Aaron Marquez	aaronmarquez@example.com	52169	1	8	2022
5	Aaron Morris	aaronmorris@example.net	25446	1	8	2022
6	Aaron Rodriguez	aaronrodriguez@example.org	26930	1	8	2022
7	Aaron Watson	aaronwatson@example.org	48124	1	8	2022
8	Adam Adkins	adamadkins@example.org	46185	1	8	2022
9	Adam Smith	adamsmith@example.org	30907	1	8	2022
10	Adam Webb	adamwebb@example.org	32977	1	8	2022
11	Adriana Flores	adrianaflores@example.net	22615	1	8	2022
12	Aimee Bartlett	aimeebartlett@example.net	93348	1	8	2022

name	SUM of order_count
William Ferguson	2
William Brady	2
Teresa Jackson	2
Tammy Hawkins	2
Steven Russell	2
Ronald Thompson	2
Michael Jones	2
Michael Gonzales	2
Matthew Lewis	2
Mary Moore	2
Kimberly Martin	2
Justin Wright	2
Elizabeth Ramirez	2
Dennis Moore	2
Andrew Jones	2
Zachary Bullock	1
Zachary Black	1

#### link\_spreadsheet





Row	id	name	percent_ma	retail_price	cost	category	order_count	profit
1	8034	Jessica London Plus Size Two	49.2537317	109.989997	73.6932983	Clothing Sets	1	36.2966995
2	8054	Woman Within Plus Size Petite	49.2537317	99.9899978	66.9932983	Clothing Sets	1	32.9966994
3	8052	N.G.U. Designs 2 piece jacket long skirt spilt up the front with studs	49.4768319	120.0	80.2799995	Clothing Sets	2	39.7200004
4	8044	Scrunch Cloth Pants Set / Pant	51.5151523	59.0	38.9399997	Clothing Sets	2	20.0600002
5	8030	Calvin Klein Women's MSY Vel	51.9756847	50.0	32.8999998	Clothing Sets	2	17.1000001

4a\_link 4b\_link



JOB II	NFORMATION	RESULTS JSON	EXECUTION DE	TAILS				
Row	id	name	percent_ma	retail_price	cost	category	order_count	profit
1	7614	Eddie Bauer Signature Stretch	202.114800	149.949996	49.6334495	Blazers & Jackets	2	100.316547
2	7590	Ulla Popken Plus Size Soutach	202.114800	89.0	29.4590003	Blazers & Jackets	2	59.5409996
3	7921	Rebecca Minkoff Women's Bec	202.114800	378.0	125.118001	Blazers & Jackets	2	252.881998
4	7579	Kenneth Cole Women's Structu	202.114800	149.5	49.4845005	Blazers & Jackets	1	100.015499
5	7760	Plus Size Black Jazzy Jacket	202.114800	34.9900016	11.5816906	Blazers & Jackets	1	23.4083109

∓Fi	Iter Enter property	name or value	
	Field name	Туре	Mode
	id	INTEGER	NULLABLE
	name	STRING	NULLABLE
	percent_margin	FLOAT	NULLABLE
	retail_price	FLOAT	NULLABLE
	cost	FLOAT	NULLABLE
	category	STRING	NULLABLE
	order_count	INTEGER	NULLABLE
	profit	FLOAT	NULLABLE





- Profitability has been calculated by percent margin
- 5 highest profitability are blazers & jackets
- 5 lowest profitability are clothing sets
- The order counts only between 1 and 2



∓ F	ilter Enter pro	perty name or	value
	Field name	Туре	Mode
	month	INTEGER	NULLABLE
	year	INTEGER	NULLABLE
	category	STRING	NULLABLE
	profit	FLOAT	NULLABLE

05\_link
5a\_link
5b\_link
5c\_link
5\_unrealized

SCHE	MA D	ETAILS	PREVI	EW	
Row	month	year		category	profit
1		6	2022	Swim	30.3789711
2		6	2022	Jeans	46.8840178
3		6	2022	Pants	31.8181126
4		6	2022	Socks	7.17949176
5		6	2022	Active	37.4729943
6		6	2022	Shorts	22.6493627
7		6	2022	Sweaters	39.1773036
8		6	2022	Underwear	13.9470795
9		6	2022	Accessories	24.5752008
10		6	2022	Tops & Tees	18.6016775
11		6	2022	Sleep & Lounge	23.2461687
12		6	2022	Outerwear & Coats	80.7842500
13		6	2022	Suits & Sport Coats	70.7132008

AVERAGE of profit	month		
category	6	7	8
Outerwear & Coats	80,78	91,44	96,92
Outerwear & Coats	00,70	51,44	90,92
Suits & Sport Coats	70,71	65,06	75,27
Blazers & Jackets	61,76	64,66	63,75
Jeans	46,88	47,04	46,93
Dresses	40,59	41,86	45,66
Suits	43,55	36,76	38,39
Sweaters	39,18	35,06	42,12
Active	37,47	36,71	25,64
Pants	31,82	32,86	31,62
Clothing Sets	33,00	34,22	25,12
Maternity	25,62	27,63	36,91
Skirts	28,67	23,88	35,10
Swim	30,38	26,98	27,97
Accessories	24,58	27,29	29,32
Pants & Capris	30,26	24,70	25,67
Fashion Hoodies & Sweatshirts	26,41	25,91	23,17
Sleep & Lounge	23,25	25,14	22,04
Shorts	22,65	21,16	21,10
Plus	17,86	17,49	29,34
Tops & Tees	18,60	18,95	18,67
Intimates	15,39	15,92	16,79
Underwear	13,95	14,56	14,92
Jumpsuits & Rompers	8,77	16,23	10,07
Socks & Hosiery	9,70	12,94	9,07
Leggings	7,78	8,86	10,64
Socks	7,18	7,25	6,97

<u>link\_spreadsheet</u>; realized profit visualization <u>link\_spreadsheet2</u>; unrealized profit visualization





SCHEMA	DETAILS	PREVIEW	
₹F	ilter Enter property nam	ne or value	
	Field name	Туре	Mode
	product_category	STRING	NULLABLE
	month	DATE	NULLABLE
	inventory_count_prev	INTEGER	NULLABLE
	inventory_count	INTEGER	NULLABLE
П	percent_change	NUMERIC	NULLABLE

6	link	

		March Control of Control			
OW	product_category	month	inventory_c	inventory_c	percent_cha
1	Accessories	2019-03-01	27	25	-7.4074074
2	Accessories	2019-04-01	28	83	196.4285714
3	Accessories	2019-05-01	17	120	605.8823529
4	Accessories	2019-06-01	188	189	0.5319149
5	Accessories	2019-07-01	301	233	-22.5913621
6	Accessories	2019-08-01	193	214	10.880829
7	Accessories	2019-09-01	344	292	-15.1162791
8	Accessories	2019-10-01	273	340	24.5421245
9	Accessories	2019-11-01	267	278	4.1198502
10	Accessories	2019-12-01	412	280	-32.038835
11	Accessories	2020-01-01	508	288	-43.3070866
12	Accessories	2020-02-01	181	339	87.2928177







link\_spreadsheet; visualization



SCHEMA	DETAILS	PREVIEW	
∓ F	ilter Enter property	name or value	
	Field name	Туре	Mode
	cohort_month	DATE	NULLABLE
	month_number	INTEGER	NULLABLE
	cohort_size	INTEGER	NULLABLE
	total_users	INTEGER	NULLABLE
П	percentage	NUMERIC	NULLABLE

<u>7\_link</u>

7b link; revenue

7c\_link; status not complete

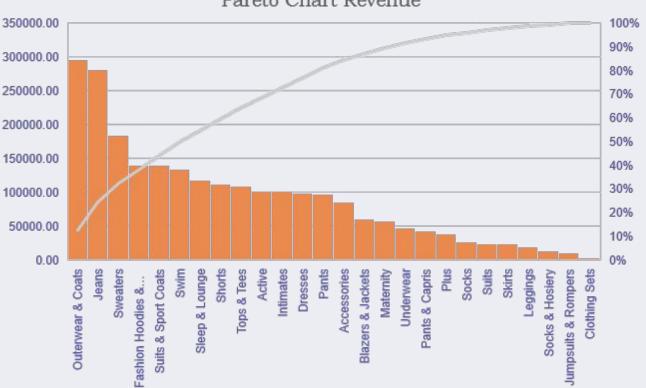
SCHE	MA DETA	ILS PREVI	EVV		
Row	cohort_mon	cohort_size	month_num	total_users	percentage
1	2022-08-01	1911	0	1911	100
2	2022-08-01	1911	1	137	7.1690215
3	2022-08-01	1911	2	6	0.3139717
4	2022-09-01	2522	0	2522	100
5	2022-09-01	2522	1	109	4.3219667
6	2022-01-01	1049	0	1049	100
7	2022-01-01	1049	1	37	3.5271687
8	2022-01-01	1049	2	11	1.0486177
9	2022-01-01	1049	3	20	1.9065777
10	2022-01-01	1049	4	10	0.9532888
11	2022-01-01	1049	5	13	1.2392755
12	2022-01-01	1049	6	17	1.620591
13	2022-01-01	1049	7	16	1.5252622
14	2022-01-01	10/0	Q	21	2.0010066



<u>link\_spreadsheet</u> <u>link spreadsheet2</u> <u>link spreadsheet3</u>; visualization







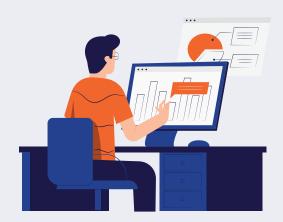
link\_spreadsheet

### **How to raise retention rate?**



## **SYNTAX**







```
SELECT
o.status,
EXTRACT(MONTH FROM o.created_at)AS month,
EXTRACT(YEAR FROM o.created_at) AS year,
SUM(oi.sale_price) AS revenue,
count(DISTINCT o.order_id) AS order_count
count(DISTINCT o.user_id) AS customers_or
der,
FROM
  `bigguery-public-data.thelook_ecommerce
.orders` o
LEFT JOIN
  `bigquery-public-data.thelook_ecommerce
.order_items` oi
ON
  o.order_id = oi.order_id
where
o.created_at between '2019-01-01 00:00:00
 UTC' and '2022-08-31 11:59:59 UTC'
GROUP BY
  o.status, month, year
```

01

```
EXTRACT(MONTH FROM o.created_at)AS month,
EXTRACT(YEAR FROM o.created_at) AS year,
SUM(oi.sale_price) AS revenue,
COUNT(DISTINCT o.order_id) AS order_count,
COUNT(DISTINCT o.user_id) AS customers_order,
SUM(oi.sale_price)/COUNT(DISTINCT o.order_id) AS AOV,
COUNT(DISTINCT o.order_id)/COUNT(DISTINCT o.user_id) AS Frequenci
es,
FROM
  `bigguery-public-data.thelook_ecommerce.orders` o
LEFT JOIN
  `bigquery-public-data.thelook_ecommerce.order_items` oi
ON
  o.order_id = oi.order_id
where
oi.status in ('Complete') and
o.created at between '2019-01-01 00:00:00 UTC' and '2022-08-31 11
:59:59 UTC'
GROUP BY
  month, year
ORDER BY
```

SELECT

```
SELECT
CONCAT(users.first_name, ' ', users.last_name) as name,
users.email,
users.id,
count(DISTINCT o.order_id) AS order_count,
```

`bigguery-public-data.thelook\_ecommerce.users` users

`bigguery-public-data.thelook\_ecommerce.order\_items` o

EXTRACT(MONTH FROM o.created\_at)AS month,
EXTRACT(YEAR FROM o.created\_at) AS year,

FROM

ON

left JOIN

where
o.status in ('Returned') and
o.created\_at between '2022-08-01 00:00:00 UTC' and '2022-08-31 11:59
:59 UTC'
GROUP BY
users.email, users.id, name, month, year
ORDER BY

#### -- Products with 5 highest margins

```
SELECT distinct
  p.id, p.name, ((p.retail_price - p.cost)/p.cost)*100 as percent_margin, p.re
tail_price, p.cost, p.category, count(DISTINCT oi.order_id) AS order_count,
  (retail_price - cost) as profit,
FROM
  `bigguery-public-data.thelook_ecommerce.products` p
LEFT JOIN
`bigquery-public-data.thelook_ecommerce.order_items` oi
on
oi.product_id=p.id
WHERE
oi.status in ('Complete')
group by
p.name, p.id, p.retail_price, p.cost, p.category
ORDER BY
  percent_margin DESC
I TMTT
  5;
```

```
-- Products with 5 lowest margins
SELECT distinct
  p.id, p.name, ((p.retail_price - p.cost)/p.cost)*180 as percent_margin, p.re
tail_price, p.cost, p.category, count(DISTINCT di.order_id) AS order_count,
  (retail_price - cost) as profit,
FROM
  `bigquery-public-data.thelook_ecommerce.products` p
LEFT JOIN
`bigguery-public-data.thelook_ecommerce.order_items` oi
on
oi.product_id=p.id
WHFRF
oi.status in ('Complete')
group by
p.name, p.id, p.retail_price, p.cost, p.category
ORDFR BY
  percent_margin ASC
LIMIT
  5;
```

```
--month1-3
SELECT
EXTRACT(MONTH FROM oi.created_at)AS month,
EXTRACT(YEAR FROM oi.created_at) AS year,
p.category,
avg(retail_price - cost) as profit,
FROM
  `bigguery-public-data.thelook_ecommerce.products` p
LEFT JOIN
`bigquery-public-data.thelook_ecommerce.order_items` oi
on
oi.product_id=p.id
where
oi.status in ('Complete') and
oi.created at between '2022-06-01 00:00:00 UTC' and '2022-08-1
5 11:59:59 UTC'
GROUP BY category, month, year
order by
year, month
```



#### --month3--SELECT

EXTRACT(MONTH FROM oi.created\_at)AS month, EXTRACT(YEAR FROM oi.created\_at) AS year, p.category,

## avg(retail\_price - cost) as profit,

FROM

`bigquery-public-data.thelook\_ecommerce.products` p
LEFT JOIN
`bigquery-public-data.thelook\_ecommerce.order\_items` oi
on
oi.product\_id=p.id
where

oi.created\_at between '2022-06-01 00:00:00 UTC' and '2022-08-15 11:59 :59 UTC'
GROUP BY category, month, year order by year, month

oi.status in ('Complete') and



#### --month2--SELECT

year, month

EXTRACT(MONTH FROM oi.created\_at)AS month, EXTRACT(YEAR FROM oi.created\_at) AS year, p.category, avg(retail\_price - cost) as profit,

## FROM

LEFT JOIN
`bigquery-public-data.thelook\_ecommerce.order\_items` oi
on
oi.product\_id=p.id

`bigguery-public-data.thelook\_ecommerce.products` p

where oi.status in ('Complete') and oi.created at between '2022-06-01 00:00:00 UTC' and '2022-07-15 1

1:59:59 UTC'
GROUP BY category, month, year order by



SELECT

--month 1--

EXTRACT(MONTH FROM oi.created\_at)AS month, EXTRACT(YEAR FROM oi.created\_at) AS year, p.category,

p.category, avg(retail\_price - cost) as profit,

`bigquery-public-data.thelook\_ecommerce.order\_items` oi on

oi.product\_id=p.id
where

UTC'

oi.status in ('Complete') and oi.created\_at between '2022-06-01 00:00:00 UTC' and '2022-06-15 11:59:59

GROUP BY category, month, year order by vear. month

```
06
```

```
(cast((inventory_count_inventory_count_prev)as decimal)/inventory_count_prev*100) as percent_change
from
select
product_category,
month,
LAG(inventory_count) OVER(ORDER BY month) inventory_count_prev,
inventory_count,
from
select
i.product_category,
date(date_trunc(oi.created_at, MONTH)) month,
count(DISTINCT i.id) AS inventory_count,
FROM
`bigquery-public-data.thelook_ecommerce.inventory_items` i
LEFT JOIN
`bigguery-public-data.thelook_ecommerce.order_items` oi
oi.product_id=i.product_id
where
oi.status in ('Complete') and
oi.created_at between '2019-01-01 00:00:00 UTC' and '2022-04-30 11:59:59 UTC'
group by
product_category,month
) obs
order by product_category, month
```

select\*,

```
with cohort_items as (
select
oi.user_id as user_id,
min(date(date_trunc(oi.created_at, MONTH))) as cohort_month,
from `bigquery-public-data.thelook_ecommerce.order_items` oi
where oi.status in ('Complete')
GROUP BY oi.user id
user_activities as (
select
oi.user_id as user_id,
DATE_DIFF(date(date_trunc(oi.created_at, MONTH)),cohort.cohort_month,MONTH) as month_number,
from `bigquery-public-data.thelook_ecommerce.order_items` oi
left join
cohort items cohort ON oi.user id=cohort.user id
where extract(year from cohort.cohort_month) in (2022)
and oi.status in ('Complete')
group by oi.user_id,month_number
cohort_size as(
SELECT cohort_month,
count(cohort.user_id) as num_users
from cohort items cohort
GROUP BY cohort.cohort_month
ORDER BY cohort.cohort month
retention_table as(
select
cohort.cohort_month,
activities.month_number,
count(cohort.user_id) as num_users
from user activities activities
left join cohort_items cohort on activities.user_id=cohort.user_id
GROUP BY cohort.cohort_month,month_number
```



```
-- our final value (cohort_month, size, month_number, percentage)
select
retention.cohort_month,
retention.month_number,
size.num_users as cohort_size,
retention.num_users as total_users,
cast(retention.num_users as decimal)/size.num_users*100 as percentage
from retention_table retention
left join
cohort_size size on retention.cohort_month=size.cohort_month
```

where retention.cohort\_month is NOT NULL

order by retention.cohort\_month, month\_number

## THANKS!

Do you have any questions?







**CREDITS:** This presentation template was created by **Slidesgo**, including icons by **Flaticon**, infographics & images by **Freepik** and illustrations by **Stories** 



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