

Game Changer Demo

김영태, Solution Engineer, Snowflake

AI SQL DEMO



Cortex AISQL

WHAT IS IT

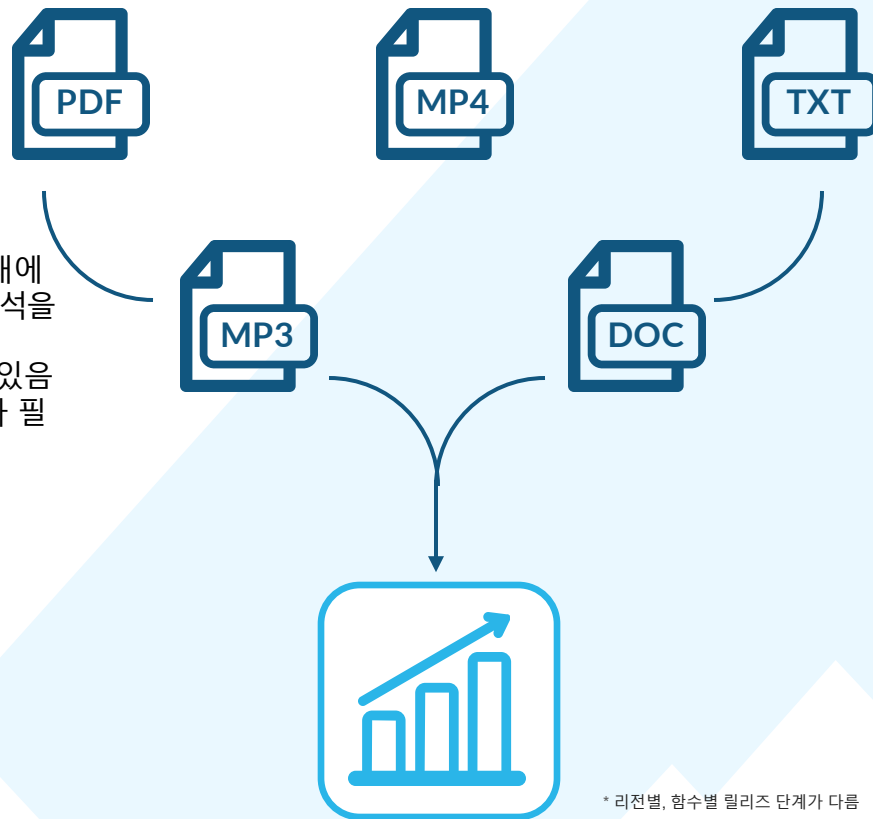
익숙한 SQL 구문을 사용하여 대용량의 정형 데이터와 multimodal 데이터 간의 의미론적 관계를 질의하도록 지원하는 새로운 유형의 AI 쿼리 language

WHY USE IT

- 최적화된 성능으로 간단한 SQL 구문을 사용하여 Snowflake 내에서 직접 정형데이터와 multimodal 데이터 모두에 대해 고급 분석을 실행
- AI 전문 지식 없는 일반 분석가도 AI 엔지니어 역량을 갖출 수 있음
- 고성능, 저비용, 간편한 사용성을 제공하므로 별도의 AI 도구가 필요 없음

HOW TO USE IT

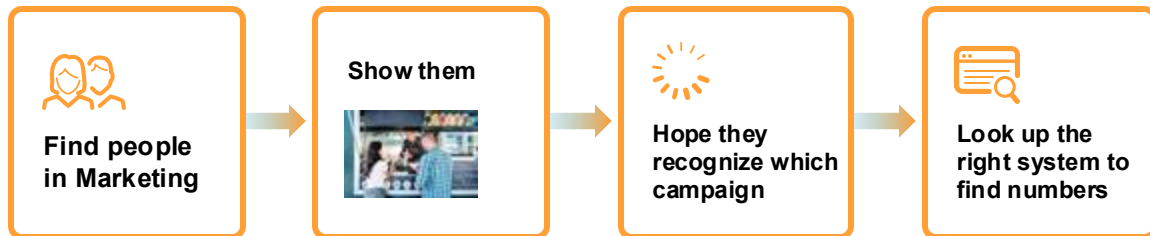
- 간단한 SQL 함수를 작성하여 정형데이터와 비정형 데이터를 함께 분석
- Snowflake 의 안전한 보안 환경 안에서 모든 multimodal 파이프라인을 생성




광고의 성과는 어땠나요?



Traditional Process: Manual & Inaccurate



광고의 성과는 어땠나요?

```
WITH filtered_ads AS
(
  SELECT id, img FROM ad_images
  WHERE
    AI_FILTER(PROMPT('{ad_images}
look like {0}',  ))
)
SELECT
  id, img,
  AVG(clicks/impressions) as ctr
FROM
  campaigns
JOIN
  filtered_ads using (id)
```

With Cortex AISQL

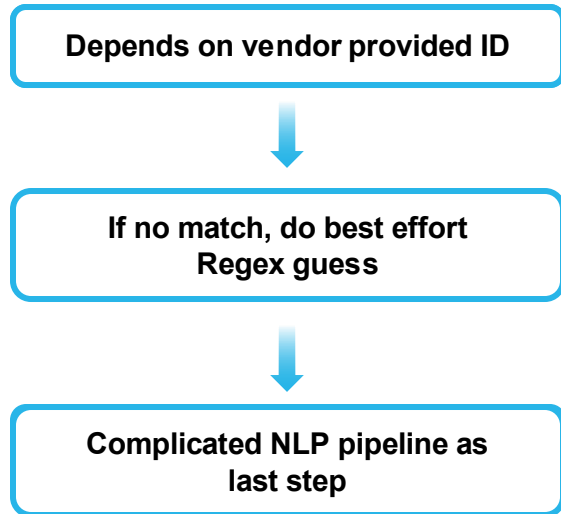
```
WHERE
  AI_FILTER(PROMPT('{ad_images}
look like {0}',  ))
)
```



Example: Joining Upon AI Relationship

뉴스 데이터를 기존의 트레이딩 스크리너(주식 선별 도구) 데이터와 결합

Traditional Process



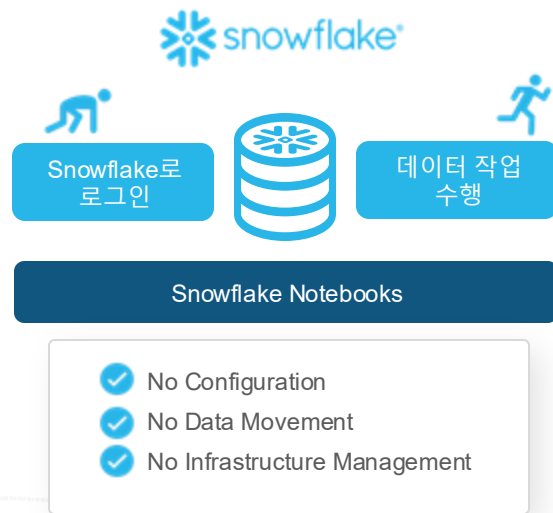
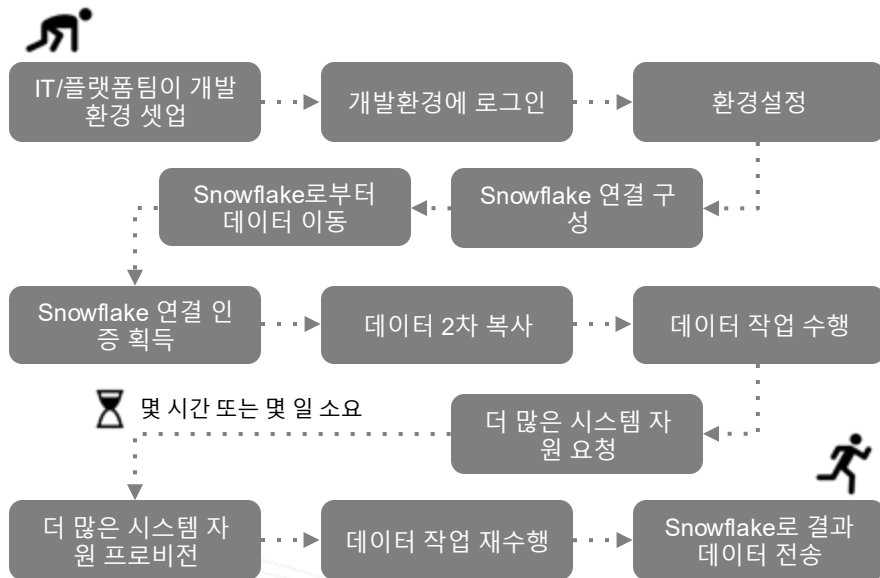
With Cortex AISQL

```
SELECT
  *
FROM raw_news r
JOIN trading_screener ts
ON AI_FILTER(
  PROMPT(
    'This news event {0} is
    related to my company {1}',
    r.news, ts.company
  )
);
```



작업 프로세스의 변화

Snowflake Notebooks는 실제 데이터 작업에만 집중하게 해드립니다



- SQL과 Python을 동시에 사용할 수 있는 적당한 개발 환경이 없고
- 비효율적인 프로세스로 인해 데이터 작업에 시간이 많이 소요되며
- 대량의 데이터가 이동됨에 따라 보안성이 저하됩니다

Snowflake 플랫폼에 통합된 효율적이고 안전한 개발 워크플로우를 제공합니다.

Dataset 1분 요약!

AISQL_HOL / RESTAURANT / FOODIMAGES

Internal Stage ACCOUNTADMIN 2 days ago

Stage Files Stage Details Lineage

FOODIMAGES (14 Files)

NAME	SIZE	LAST MODIFIED
class_foie_gras_3448136.jpg	58.8KB	2 days ago
class_bread_pudding_518692.jpg	42.8KB	2 days ago
class_bibimbap_692542.jpg	52.6KB	2 days ago
class_baby_back ribs_3443942.jpg	110.7KB	2 days ago
class_gnocchi_3444882.jpg	39.3KB	2 days ago
class_fafee_2329112.jpg	71.8KB	2 days ago
class_beef_carpaccio_3410279.jpg	54.6KB	2 days ago
class_greek_salad_2647381.jpg	87.3KB	2 days ago
class_frozen_yogurt_1463962.jpg	27.9KB	2 days ago
class_club_sandwich_2124027.jpg	55.5KB	2 days ago
class_baklava_2659433.jpg	41.1KB	2 days ago
class_apple_pie_865073.jpg	50.3KB	2 days ago
class_chocolate_cake_458210.jpg	73.7KB	2 days ago
class_crisp_cake_367088.jpg	35.5KB	2 days ago

AISQL_HOL / RESTAURANT / DOORDASH_100

Table ACCOUNTADMIN 2 days ago 100 40.0KB

Table Details Columns Data Preview Copy History Lineage

COMPUTE_WM 100 Rows • Updated just now

RESTAURANT_NAME	RESTAURANT_CUISINE_TYPE	PRICE_RANGE	RESTAURANT_LOCATION_AREA	RD
1 Larson and Sons Aegean	Mediterranean	\$\$\$	Midtown	Go
2 Wagner-Howard Curry	Indian	\$\$\$	University Area	Col
3 Moreno-Phillips Italiano	Italian	\$		
4 Dominguez-Lee Trattoria	Italian	\$\$\$		
5 Landry, Joseph and Jones	American	\$		
6 Macdonald, Ashley and Murphy Italiano	Italian	\$\$		
7 Howard-Martin Diner	American	\$\$\$\$		
8 Ward Inc				
9 Noble PLC				
10 Camacho-Hill				
11 Lep-Phillips	French	\$\$\$		
12 Bahup PLC	Chinese	\$\$\$\$		
13 Ramirez, Bell and Simpson Dragon	Chinese	\$\$\$		
14 Wilson Inc	Mediterranean	\$		

AISQL_HOL / RESTAURANT / DOORDASH_100

Table ACCOUNTADMIN 2 days ago 100 40.0KB

Table Details Columns Data Preview Copy History Lineage

COMPUTE_WM 100 Rows • Updated 1 minute ago

RESTAURANT_HAS_TAKEOUT	RESTAURANT_DATE_ADDED	CUSTOMER_NAME	CUSTOMER_EMAIL	CUSTOMER_ID	RATING	REVIEW_DATE	ORDER_TYPE	REVIEW_TEXT
1 TRUE	2024-07-19	Laura Williams	lwilliams@example.org	2278	4.5	2024-08-26T00:10:51.000+0000	delivery	"I'm so glad I discovered Larson and Sons Aegean, a hidden gem in Midtown. Their Aegean-inspired dishes are a true taste of the Mediterranean. I had the lamb chops and the hummus, and they were both fantastic. The service was excellent, and the atmosphere was just what I needed. I'll definitely be back soon!"
2 TRUE	2023-08-21	Harold Howard	hhoward@example.net	3684	4.0	2025-01-13T00:10:51.000+0000	takeout	"I was thoroughly impressed with my delivery order from Wagner-Howard Curry. The food was hot, delicious, and exactly what I needed. The service was excellent, and the atmosphere was just what I needed. I'll definitely be back soon!"
3 TRUE	2023-10-13	Katherine James	kjames@example.com				dine-in	"**4.0/5 stars** I stopped by Moreno-Phillips Italiano to celebrate a birthday. The food was delicious, and the service was excellent. The atmosphere was just what I needed. I'll definitely be back soon!"
4 TRUE	2023-04-01	Laura Williams	lwilliams@example.org				dine-in	"I recently had the pleasure of dining at Dominguez-Lee Trattoria. The food was delicious, and the service was excellent. The atmosphere was just what I needed. I'll definitely be back soon!"
5 TRUE	2024-04-07	Jessica Wagner	twagner@example.com				dine-in	"I was so glad I stumbled upon Landry, Joseph and Jones - the food was delicious, and the service was excellent. The atmosphere was just what I needed. I'll definitely be back soon!"
6 TRUE	2024-03-16	Lauren King	lking@example.org				dine-in	"**2.5 stars** I'm usually not one to write scathing reviews, but I was disappointed with my experience at Howard-Martin Diner. The food was mediocre, and the service was slow. I'll definitely be back soon!"
7 TRUE	2024-03-06	Kristal Joyce	kjoyce@example.org				takeout	"**3.0/5 stars** I ordered takeout from Ward Inc to celebrate a birthday. The food was delicious, and the service was excellent. The atmosphere was just what I needed. I'll definitely be back soon!"
8 FALSE	2024-12-24	Barbara Holmwy	bholmwy@example.net				delivery	"**4.0/5 stars** I ordered from Noble PLC for my wife's birthday. The food was delicious, and the service was excellent. The atmosphere was just what I needed. I'll definitely be back soon!"
9 TRUE	2024-12-03	Michael Frank	mfrank@example.org				delivery	"**4.0/5 stars** I recently tried Camacho-Hill's delivery service, and I was thoroughly impressed. The food was hot, delicious, and exactly what I needed. The service was excellent, and the atmosphere was just what I needed. I'll definitely be back soon!"
10 TRUE	2024-08-26	David Allen	dallen@example.net				dine-in	"I'm still raving from the exceptional dining experience I had at Lep-Phillips. The food was delicious, and the service was excellent. The atmosphere was just what I needed. I'll definitely be back soon!"
11 TRUE	2025-01-13	Morgan James	mjames@example.net				delivery	"I was thoroughly impressed with my delivery order from Bahup PLC. The food was hot, delicious, and exactly what I needed. The service was excellent, and the atmosphere was just what I needed. I'll definitely be back soon!"
12 TRUE	2024-03-05	Samantha Alexander	salexander@example.com				dine-in	"**2.5 stars** I'm usually not one to write scathing reviews, but I was disappointed with my experience at Wilson Inc. The food was mediocre, and the service was slow. I'll definitely be back soon!"
13 TRUE	2023-08-22	Christopher Daniels	cdaniels@example.net				takeout	"I stopped by Wilson Inc to try their Mediterranean takeout, and I was thoroughly impressed. The food was hot, delicious, and exactly what I needed. The service was excellent, and the atmosphere was just what I needed. I'll definitely be back soon!"
14 TRUE	2023-09-08	Mt. Kevin Luomo Diner	mluomo@example.com				takeout	"I stopped by Wilson Inc to try their Mediterranean takeout, and I was thoroughly impressed. The food was hot, delicious, and exactly what I needed. The service was excellent, and the atmosphere was just what I needed. I'll definitely be back soon!"

DoorDash 플랫폼 데이터 : 레스토랑 정보, 리뷰내용, 고객 기본정보

비정형 이미지 파일

Snowflake Intelligence DEMO



Snowflake Intelligence

WHAT IS IT

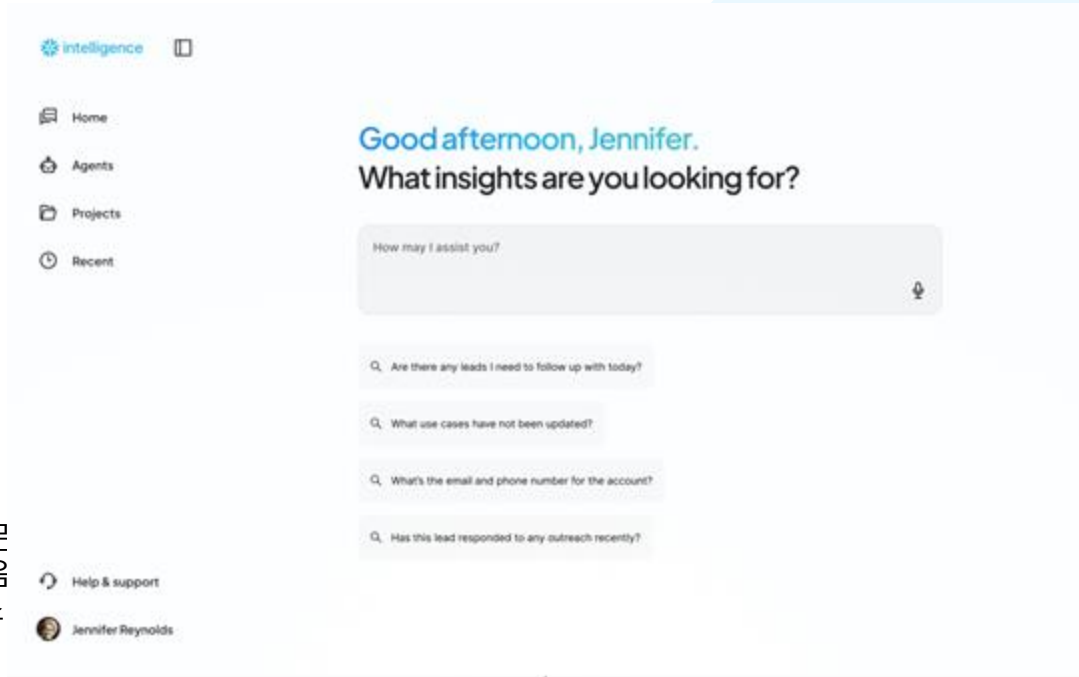
비즈니스 사용자가 SQL이나 대시보드 없이 정형 및 비정형 데이터를 쿼리하고, 거버넌스가 적용된 Insight 를 얻을 수 있는 자연어 인터페이스

WHY USE IT

- 비즈니스 사용자가 모든 데이터에서 스스로 답을 찾을 수 있도록 지원
- 완벽한 보안 환경 아래 정형 및 비정형 데이터 소스를 통합
- ad-hoc 요청을 줄여 데이터 팀의 부담을 완화

HOW TO USE IT

- <https://ai.snowflake.com> UI 에서 자연어로 질문
- 문서, 테이블 및 외부 소스로부터 통찰력을 얻음
- Cortex Agents 를 통해 App 포함시키거나 커스터마이징 가능



**THANK
YOU**

