



DRIVING VACCINATION UPTAKE AMONG PEOPLE WITH DIABETES USING DEEP ANALYTICS FOR A GLOBAL PHARMA MAJOR



About the Client

The client is a major global biopharmaceutical company with manufacturing facilities in 36 countries that provides healthcare solutions to over 170 countries globally.

Client Challenge

The client was deeply concerned with the decline in sales of flu vaccines and the lack of information among its target customers on the importance of getting vaccinated. They wanted to understand the factors impacting the adoption rate of vaccines and customer behavior around the flu season, with insights on how to drive WHO compliance for healthcare maturity. They also wanted a predictive framework to forecast flu outbreaks through vaccination rates, weather data, demographics, and other information.

Movate solution

Movate established a Google Cloud Platform and created a delivery model to support and enable flu vaccine interventions across multiple countries while automating the entire flu forecasting framework through three digital disruptors:

1. Simulation modeling

2. Business intelligence and visualization tools

3. Social media analytics

1. Simulation modeling – powered by Movate Insights

- Created a simulation modeling framework to identify the best time for vaccine interventions to drive sales
- Drove sales enablement initiatives by defining performance measures and formulating a hypothesis to increase vaccine adoption among target users
- Established a primary data platform to conduct surveys and enrich the survey data with weather, flu trends, and third-party health surveys
- Built ML models to uncover factors impacting flu vaccine compliance and created customer segments based on the identified factors
- Utilized predictive modeling techniques to predict flu outbreaks three weeks in advance

About Movate Insights

Movate's Insights is a modular, cloud-based, secure and scalable data platform that aggregates data (structured, unstructured, historical) from multiple sources and produces real-time business insights through the power of AI/ML models.

The platform collates data and runs advanced algorithms over the datasets to arrive at recognizable patterns, trends and recommends actionable insights which businesses and enterprises can use for faster issue resolutions. Read more about Movate Insights [here](#)

2. Business intelligence and visualization tools

- Collated, integrated, and processed real-time data based on key parameters like patient perceptions of vaccines, factors affecting vaccine adoption, and the impact of vaccine education
- Gained a complete understanding on promoting vaccines by knowing patient perceptions of flu and vaccines, quantifying target user perceptions and their degree of influence on taking vaccines, simulating real-time results when certain perceptions are changed, and targeting vaccine interventions based on historical data
- Integrated a real-time dashboard to track flu outbreak risks, vaccination rates, patient behavior, and online search trends on flu vaccines

3. Social media analytics

- Analyzed online search trends to understand patient perceptions on flu and flu vaccines
- Utilized natural language processing algorithms to mine and understand social media comments and sentiments on flu vaccines
- Improved sales strategies by understanding user social sentiments and the gaps in understanding flu as a disease
- Streamlined information flow to target users by knowing social talk trends and search tendencies

Movate's solution addressed the following challenges for the client:

- Improved patient perception towards vaccination and revived vaccine sales
- Increased visibility into patients' journey and behavior to drive vaccination uptake
- Predictability to forecast flu outbreaks through weather data and vaccination rates based on demographics
- Real-time insights on how to better protect the public's health and improve the quality of patient care
- Deployed a rapid prototype with a scalable bespoke solution minimizing the time from data to insights to action

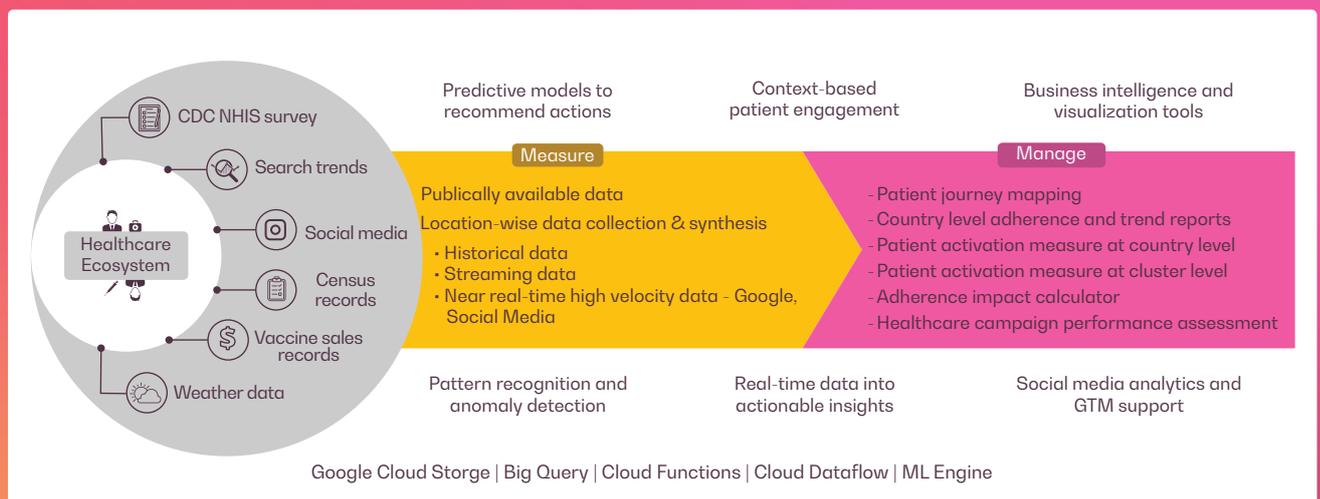


Figure 1: AI-powered predictive analytics and decision enablement system

Business benefits

- 5% improvement in vaccination uptake
- **Customized analytics model:** A reusable analytics framework involving a real-time dashboard to provide self-service visualizations for critical decision-makers and reduce overall cycle time from data to insights
- **Informed decision-making:** Enabled a recommendation framework in identifying enablers to drive flu vaccine acceptance rates
- **Improved sales margins:** Insights to understand patient segments and improve flu vaccine sales
- **Maximized vaccine acceptance rates:** Mapped online topics to offline patient behavior

About Movate

Movate, formerly CSS Corp, is a digital technology and customer experience services company committed to disrupting the industry with boundless agility, human-centered innovation, and a relentless focus on driving client outcomes. Recognized as one of the most awarded and analyst-accredited companies in its revenue range, Movate helps ambitious, growth-oriented companies across industries stay ahead of the curve by leveraging its world-class talent of over 11,700+ full-time Movators across 20 global locations and a gig network of thousands of technology experts across 60 countries, speaking over 100 languages.

For more information, please send a mail to info@movate.com or visit www.movate.com.