



Lead scoring system for an air ticket sales company

**17% sales growth for flight
booking platform**

About

WaveAccess is a results focused software development company that provides high quality software outsourcing services to hundreds of emerging and established companies globally. We use our technical expertise to increase business efficiencies, optimize slow or unreliable systems, recover projects that have gone off track and bring ambitious ideas to life.

22

years of delivering
successful outcomes
for customers

800+

talented and passionate
professionals

8

R&D centers
and regional
offices

17+

industry verticals
from banking
to healthcare

500+

successful projects
delivered and counting

96%

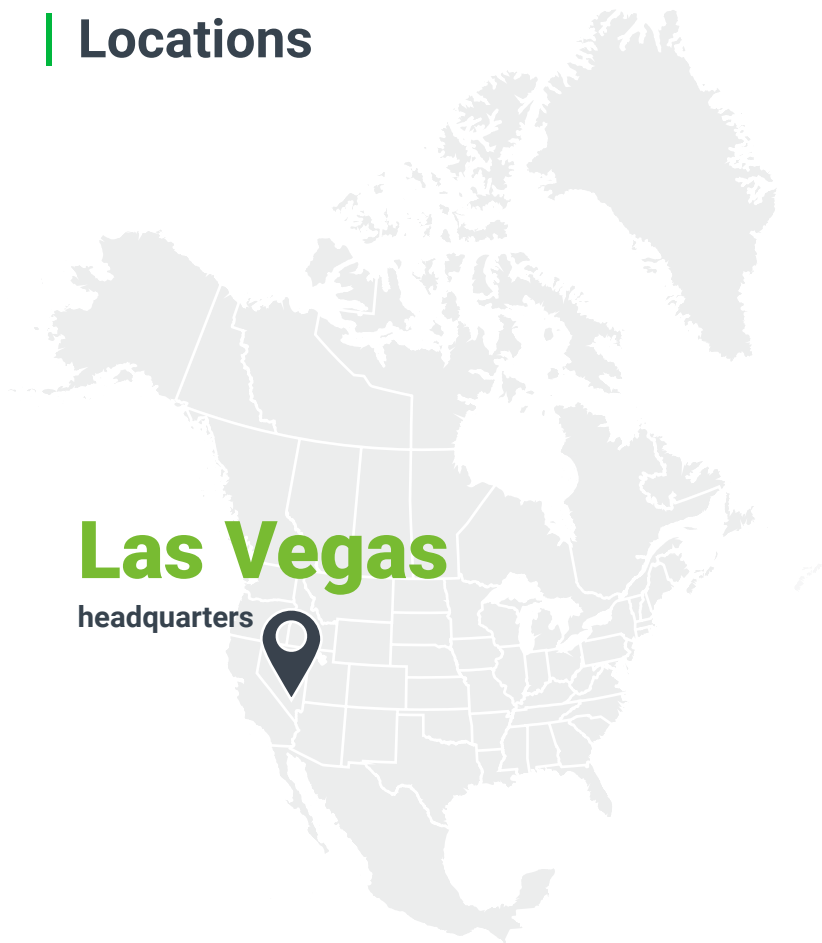
customer
satisfaction index

Awards and Recognitions



SCI-TECH AWARDS
(ACADEMY OF MOTION PICTURE
ARTS AND SCIENCES)

Locations



USA
sales offices



Denmark
sales offices



Eastern Europe
sales offices



Germany
sales offices

Core Competencies



Implementation of highly loaded and highly scalable systems



Workflow and business process automation



Development of Real Time Monitoring Systems



Microsoft Dynamics CRM development, customization and implementation



Blockchain implementation



Web and Mobile applications development



Building ETL and BI Systems



Project recovery



Building AI and Machine Learning based systems



System Integration and optimization



Data import and migration



IoT project development

Client

Wholesales Flights – is a 'boutique' travel agency specializing in business and first class airfare and expert travel support. Contracts with major consolidators enable the company to offer steep discounts (up to 70%). The tickets are sold via the company's websites: a user fills out a form on a website, later the travel manager calls them back, refines details, and helps to close the deal.

| Business goal

When selling premium class goods and services, businesses often discover conversions dramatically slowing down over time. At first, it firmly increases, but after the turnover growth, companies start fighting for hundredths of a percent. And even the slightest conversion rate improvement means appreciable sales growth.

Our customer faced a problem: their conversion rate had become stagnant for a long time, despite their travel experts' efforts, premium quality, competitive prices, and customer care. Trainings, UX improvements, and marketing efforts hadn't brought them the desired result, and the company decided to find a brand new method.

| Solution

Our customer decided to revamp their management process and help their travel experts by providing customers better offers thus closing more deals. To achieve this, they paid maximum attention to lead management and to their incoming requests.

Managers manually processed users' requests: they read a request, called a user back and offered a selection of tickets. They didn't always close a deal, and sometimes a user never answered their phone. While travel managers were trying to call back uninterested users, the real hot leads may have been overlooked.

So there was a goal:

- Forecast automatically, which user is a hot lead, and if they are ready to answer the phone.
- Correspondingly rate users' requests so they are directed to travel managers who are most likely to close the deal (in order to call them back first).

Machine learning is used within the project to detect based on the request's content and other data, if the author is likely to pick up the phone and if they are ready to pay. By ranging the list from the more prospective users to the less prospective ones, managers can sell more.

Why WaveAccess?

Wholesales Flights is our long-term client. We developed several projects for the company, among them are:

- WSF's website and its innovative call-center has been completed (read the case).
- The native mobile application development project is in the final stage.
- The completed solutions are supported by WaveAccess.

Among the reasons to choose WaveAccess was our specialization in the development of solutions based on artificial intelligence and machine learning technologies.

Process

Because of a lack of initial data, our developers first had to organize data gathered from the website. Some facts about each user would be gathered and analysed 'on the fly', as a user browses, searches, and sends a request:

1. Query contents (chosen destination, dates and time);
2. Time and date of the request, geotag, IP address;
3. Where the flight is supposed to go and where from (country, city);
4. Tickets class;
5. Email's domain.
6. Customer journey and traffic source.

After choosing machine learning algorithms and testing them, we created the Proof of Concept that proved the idea of leads prediction to be realistic. The requests from the Wholesales Flights website are gathered and rated according to lead quality. Travel managers first call back to the more promising leads, which increases both likeliness of picking up the phone, and of making a sale.

Travel managers' efficiency is also rated by a number of metrics. The solution tracks how quickly the request was handled, how successful the negotiation was, and other qualifying parameters.

Agency	Lead Contact Name	Destination	Travel Dates	Price	Status	Click to Call
Wholesale.com	John Doe	London	2023-01-15	1200	Leads of Interest	Click to Call
Wholesale.com	Jane Smith	Paris	2023-02-01	1500	Leads of Interest	Click to Call
Wholesale.com	Mike Johnson	NYC	2023-03-10	800	Leads of Interest	Click to Call
Wholesale.com	Sarah Lee	LA	2023-04-20	950	Leads of Interest	Click to Call
Wholesale.com	David Kim	Chicago	2023-05-05	1100	Leads of Interest	Click to Call
Wholesale.com	Emily White	San Francisco	2023-06-15	1300	Leads of Interest	Click to Call
Wholesale.com	Chris Brown	Seattle	2023-07-25	1000	Leads of Interest	Click to Call
Wholesale.com	Alex Green	Portland	2023-08-10	900	Leads of Interest	Click to Call
Wholesale.com	Mia Black	Denver	2023-09-01	1050	Leads of Interest	Click to Call
Wholesale.com	Noah Grey	Phoenix	2023-10-15	850	Leads of Interest	Click to Call
Wholesale.com	Olivia Pink	San Diego	2023-11-01	1150	Leads of Interest	Click to Call
Wholesale.com	Liam Yellow	Los Angeles	2024-01-10	1300	Leads of Interest	Click to Call
Wholesale.com	Isabella Purple	San Jose	2024-02-20	1000	Leads of Interest	Click to Call
Wholesale.com	Ethan Blue	San Antonio	2024-03-15	900	Leads of Interest	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-04-01	1100	Leads of Interest	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-04-15	1200	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-04-20	1300	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-04-25	1400	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-05-01	1500	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-05-05	1600	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-05-10	1700	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-05-15	1800	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-05-20	1900	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-05-25	2000	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-06-01	2100	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-06-05	2200	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-06-10	2300	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-06-15	2400	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-06-20	2500	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-06-25	2600	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-07-01	2700	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-07-05	2800	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-07-10	2900	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-07-15	3000	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-07-20	3100	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-07-25	3200	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-08-01	3300	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-08-05	3400	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-08-10	3500	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-08-15	3600	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-08-20	3700	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-08-25	3800	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-09-01	3900	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-09-05	4000	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-09-10	4100	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-09-15	4200	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-09-20	4300	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-09-25	4400	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-10-01	4500	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-10-05	4600	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-10-10	4700	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-10-15	4800	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-10-20	4900	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-10-25	5000	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-11-01	5100	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-11-05	5200	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-11-10	5300	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-11-15	5400	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-11-20	5500	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-11-25	5600	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2024-12-01	5700	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2024-12-05	5800	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2024-12-10	5900	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2024-12-15	6000	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2024-12-20	6100	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2024-12-25	6200	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2025-01-01	6300	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2025-01-05	6400	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2025-01-10	6500	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2025-01-15	6600	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2025-01-20	6700	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2025-01-25	6800	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2025-02-01	6900	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2025-02-05	7000	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2025-02-10	7100	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2025-02-15	7200	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2025-02-20	7300	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2025-02-25	7400	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2025-03-01	7500	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2025-03-05	7600	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2025-03-10	7700	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2025-03-15	7800	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2025-03-20	7900	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2025-03-25	8000	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2025-04-01	8100	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2025-04-05	8200	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2025-04-10	8300	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2025-04-15	8400	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2025-04-20	8500	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2025-04-25	8600	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2025-05-01	8700	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2025-05-05	8800	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2025-05-10	8900	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2025-05-15	9000	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2025-05-20	9100	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2025-05-25	9200	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2025-06-01	9300	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2025-06-05	9400	New Requests	Click to Call
Wholesale.com	Ava Orange	San Francisco	2025-06-10	9500	New Requests	Click to Call
Wholesale.com	Noah Green	San Francisco	2025-06-15	9600	New Requests	Click to Call
Wholesale.com	Olivia Pink	San Francisco	2025-06-20	9700	New Requests	Click to Call
Wholesale.com	Liam Yellow	San Francisco	2025-06-25	9800	New Requests	Click to Call
Wholesale.com	Isabella Purple	San Francisco	2025-07-01	9900	New Requests	Click to Call
Wholesale.com	Ethan Blue	San Francisco	2025-07-05	10000	New Requests	Click to Call

This data helps to make phone communication more effective, allowing agents to adapt their script to the customer's profile and behavior. The highest-margin queries are redirected to the most skilled managers.

Name	Phone ID	Status	Last Call	Status	Phone	Email	Task	Time	CAC
John Doe	00123456789	Available for call	2023-10-25	Available for call	+1-415-555-1234	john.doe@wholesale.com	10	15	15.00%
Jane Smith	00987654321	Available for call	2023-10-24	Available for call	+1-415-555-9876	jane.smith@wholesale.com	12	18	15.00%
Mike Johnson	00555111111	Available for call	2023-10-23	Available for call	+1-415-555-5555	mike.johnson@wholesale.com	8	12	15.00%
Sarah Lee	00444222222	Available for call	2023-10-22	Available for call	+1-415-555-4444	sarah.lee@wholesale.com	15	20	15.00%
David Kim	00333333333	Available for call	2023-10-21	Available for call	+1-415-555-3333	david.kim@wholesale.com	11	16	15.00%
Emily White	00222222222	Available for call	2023-10-20	Available for call	+1-415-555-2222	emily.white@wholesale.com	9	14	15.00%
Chris Brown	00111111111	Available for call	2023-10-19	Available for call	+1-415-555-1111	chris.brown@wholesale.com	13	17	15.00%
Alex Green	00000000000	Available for call	2023-10-18	Available for call	+1-415-555-0000	alex.green@wholesale.com	7	10	15.00%
Mia Black	00999999999	Available for call	2023-10-17	Available for call	+1-415-555-9999	mia.black@wholesale.com	14	19	15.00%
Noah Grey	00888888888	Available for call	2023-10-16	Available for call	+1-415-555-8888	noah.grey@wholesale.com	10	15	15.00%
Olivia Pink	00777777777	Available for call	2023-10-15	Available for call	+1-415-555-7777	olivia.pink@wholesale.com	12	17	15.00%
Liam Yellow	00666666666	Available for call	2023-10-14	Available for call	+1-415-555-6666	liam.yellow@wholesale.com	8	11	15.00%
Isabella Purple	00555555555	Available for call	2023-10-13	Available for call	+1-415-555-5555	isabella.purple@wholesale.com	11	14	15.00%
Ethan Blue	00444444444	Available for call	2023-10-12	Available for call	+1-415-555-4444	ethan.blue@wholesale.com	9	12	15.00%
Ava Orange	00333333333	Available for call	2023-10-11	Available for call	+1-415-555-3333	ava.orange@wholesale.com	13	16	15.00%
Noah Green	00222222222	Available for call	2023-10-10	Available for call	+1-415-555-2222	noah.green@wholesale.com	7	10	15.00%
Olivia Pink	00111111111	Available for call	2023-10-09	Available for call	+1-415-555-1111	olivia.pink@wholesale.com	14	18	15.00%
Liam Yellow	00000000000	Available for call	2023-10-08	Available for call	+1-415-555-0000	liam.yellow@wholesale.com	6	9	15.00%
Isabella Purple	00999999999	Available for call	2023-10-07	Available for call	+1-415-555-9999	isabella.purple@wholesale.com	15	20	15.00%
Ethan Blue	00888888888	Available for call	2023-10-06	Available for call	+1-415-555-8888	ethan.blue@wholesale.com	10	15	15.00%
Ava Orange	00777777777	Available for call	2023-10-05	Available for call	+1-415-555-7777	ava.orange@wholesale.com	12	17	15.00%
Noah Green	00666666666	Available for call	2023-10-04	Available for call	+1-415-555-6666	noah.green@wholesale.com	8	11	15.00%
Olivia Pink	00555555555	Available for call	2023-10-03	Available for call	+1-415-555-5555	olivia.pink@wholesale.com	11	14	15.00%
Liam Yellow	00444444444	Available for call	2023-10-02	Available for call	+1-415-555-4444	liam.yellow@wholesale.com	9	12	15.00%
Isabella Purple	00333333333	Available for call	2023-10-01	Available for call	+1-415-555-3333	isabella.purple@wholesale.com	13	16	15.00%
Ethan Blue	00222222222	Available for call	2023-09-30	Available for call	+1-415-555-2222	ethan.blue@wholesale.com	7	10	15.00%
Ava Orange	00111111111	Available for call	2023-09-29	Available for call	+1-415-555-1111	ava.orange@wholesale.com	14	18	15.00%
Noah Green	00000000000	Available for call	2023-09-28	Available for call	+1-415-555-0000	noah.green@wholesale.com	6	9	15.00%
Olivia Pink	00999999999	Available for call	2023-09-27	Available for call	+1-415-555-9999	olivia.pink@wholesale.com	15	20	15.00%
Liam Yellow	00888888888	Available for call	2023-09-26	Available for call	+1-415-555-8888	liam.yellow@wholesale.com	10	15	15.00%
Isabella Purple	00777777777	Available for call	2023-09-25	Available for call	+1-415-555-7777	isabella.purple@wholesale.com	12	17	15.00%
Ethan Blue	00666666666	Available for call	2023-09-24	Available for call	+1-415-555-6666	ethan.blue@wholesale.com</			

| Technologies

1. Python language;
2. MySQL database;
3. ML-server – flask;
4. Data manipulation and analysis – Pandas;
5. ML-model – gradient boosting from scikit-learn.



pandas



| Result:

17% sales growth

Machine learning algorithms help to predict conversion and marginality of customers' requests based on gathered data. As a result:

- Processing of the most promising users' requests became faster;
- The company can check and improve a manager's efficiency by a set of metrics;
- The company can track traffic and discover correlations with closed deals.

According to Wholesales Flights testimonial, the sales rate increased by 17%, regardless of the high competition in the industry.



If you have a project for us,
please get in touch

hello@wave-access.com

www.wave-access.com