



Data Analytics & Engineering platform for a US based company offering Data Analytics and AI powered Marketing.



OUR CLIENT

After the merging of two large US-based companies in 2020 – the first being a leader in direct mail marketing & event promotion services set up in 2016 and the second, a leading name in the full-service fitness marketing of effective digital and print solutions – our client rebranded its business focus and priorities. Today, the company offers enhanced data analytics powered by Artificial Intelligence, helping their clients effectively target the consumers most likely to become customers. It prospects new customers by providing a more comprehensive, data-driven approach to marketing, with the ability to handle all aspects of marketing on multiple platforms.



THE ASK

Our client needed to build a new analytics platform that not only helped with targeting prospects, but also enabled them to improve tracking, monitor their successes and optimize marketing budgets. The aim was to ensure access to a user-friendly portal, where they'd be able to manage campaigns and check analytics cutting across their customers. This would aid in effective data consolidation, reviews and reporting at various aggregate levels – leading to richer business insights, smarter decisions, better predictive capabilities and sharing of cross-learning across stores and campaigns.

KEY PRODUCT PARAMETERS

Innovative product parameters that we kept in mind, were as follows:

- Prime focus on data security, with data never being shared with any third party tool.
- Creation of a centralized platform for accessing statistics, cutting across all customers.
- Enablement of data aggregation – drilling down and through, slicing and dicing data across Customers, Stores, Campaigns, Locations, Mail & Visit Type.
- Structured reporting methodology at the customer level, streamlining the reporting processes.
- Ability to conduct ad-hoc analysis and to produce ad-hoc reports.
- Creation of reports/dashboards with the required metrics.
- Capability of data-driven insights and predictability.
- Syncing the data platform system's design and architecture with the reporting tools.





OUR SOLUTION

Our client was moving fast moving towards its newly aligned post-merger goals – serving 10,000+ customers, executing 1,50,000+ campaigns, and aiming to acquire 10 million+ new customers. Given the scale of operations, as their consulting, design and software partner, we needed to be quick, accurate, scalable and consistent in our design and development approach.

The focal points of our digital journey with our client are summarized below:

- Helping them gain insights on how well their company was doing on key business metrics.
- Attracting customers through their running campaigns, thereby scaling up retention rates.
- Accommodation of more customers down the line, with different data systems being integrated smoothly with the existing data platform.
- Promoting business visibility through insights and reports.
- Providing predictive insights that would help them course-correct their business on time.
- Complete, accurate and scalable architecture, with analytics and predictive capabilities.



While designing the system, we evaluated the current system problems. A key challenge we found, was that our client had many 'store users'. Getting data from a variety of heterogeneous sources meant that our system design had to keep data accurate, consistent and meaningful for future business needs – especially for data in different file formats and sources. We had to devise a Business Intelligence solution that provided the UI to support file uploads and embedded reports.

The key facets of our design addressed the following:

- Analysis and identification of different sources to provide a fully automatic solution (POS upload by Web interface, Full throttle, SFTP, FTP, Email).
- Understanding of the existing system workflow (campaign, print cycles, all campaign line items, comprehensive campaign mailing list).
- Consideration of current & future data sources, data type, data flow and expected size of data.
- Creation of different data injection ETL pipelines for different data sources.
- Profiling of data flow and design, keeping the next 5 years in mind.
- Maintaining a log of all data received, through audits and logging to the lowest level of data.
- Effective logical and physical modelling for accurate schema design.
- The multiplicity of business users for customers.
- Effective design of dashboards through logical visualization – bringing simplicity, accuracy and consistency to every Business Unit.
- Evaluation of different cloud platforms, based on architecture needs and cost-effectiveness.
- Architecture design that needs minimal or no maintenance.



SOLUTIONS SOFTWARE & APPLICATION

We used the following technologies that were custom-fit to our solution:

- > Azure VM for greater data security, more effective management of SSIS, leveraging of SSIS existing license and better management of the application.
- > Azure SQL Server as the optimal solution for the business and architecture of the application.
- > SQL Server integration services.
- > SQL Server to leverage the existing SQL license for one of the on-premise components.
- > Software as a Service (SaaS) capabilities ensuring security of offerings, scalability and durability, unmatched hybrid capabilities and an integrated environment with other Microsoft tools like Power BI, Azure SQL, Analytics and Intelligence capabilities).
- > Power BI Embedded to serve many users (2000+) with a single license.

Being exposed to our client's campaign analysis domain helped us in these critical areas:

Problem Formulation	Data Migration and Automation	Data Collection	Data Pre-processing & Feature Engineering Modeling	Results Interpretation	Discussion and Conclusion of vital concepts
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THE OUTCOME

The end-to-end solution we came up with showed excellent results, helping our client align seamlessly to their expanding business goals and priorities. Rich data is now giving them deep business insights about their current and future customers, and helping them take quicker, smarter decisions based on better predictive abilities.

Users can understand the effectiveness of individual campaigns, their ROI and the response rates of the campaigns, down to every customer visit and revenue earned. Sales trend analyses have been facilitated, data has been standardized and the effective presentation of data flow in the system has vastly enhanced the maintenance of data quality. As a result, we now enjoy a long-term relationship.



ABOUT NEWVISION

NewVision Software is a global information technology consulting and services company. We are digital natives discovering ideas, constantly innovating, improvising to build a better future for our customers. We strengthen and transform businesses by providing focused software solutions. Headquartered in India with presence in the US and the Middle East, the company offers a range of innovative and high-quality consulting services across several sectors and practices to help our clients adapt to the digital world to improve their results.

As a Centre of Excellence-based organisation, we follow frameworks that deliver technology leadership, inculcates best practices, accelerates research and training for the following offerings to our clients and partners.

SOFTWARE PRODUCT ENGINEERING

Nurturing your idea end to end

BUSINESS PROCESS MANAGEMENT

Process-powered profitability

QA AUTOMATION

Test. Automate. Simplify.

CLOUD

Unlock Scale, Unlock Speed, Unlock the Cloud Continuum.

DEVOPS

Transform faster and safer

UTILITIES

Transforming lives globally

DATA

Demand more from data