



CONFIDENTIAL
ANALYTICS AS A
SERVICE (AaaS)
GEOSPATIAL
PLATFORM



GALLIVAN

A collage of four images is arranged diagonally across the page. From top-left to bottom-right: 1) A close-up of an airplane wing against a sky with clouds. 2) A yellow industrial robotic arm in a factory setting. 3) A red and white Formula 1 race car on a track, with another car visible in the background. 4) A white car body on an assembly line in a factory, with various mechanical parts and tools visible.

The Opportunity

Gallivan, an Indianapolis-based marketing and appraisal firm in business since 1991, has been retained as exclusive sales agent to liquidate the assets of an analytics and technology company brought down by the COVID pandemic.

Since 2001, our client has served an unusual customer mix consisting of membership organizations and healthcare/health insurance players. Their tools have helped customers of both types to understand and predict member behavior and to conduct retail site location studies and retail network optimizations. The analytics deployed in our client's IP – applications, databases, user interfaces, APIs, patents, knowhow, etc. – have generated thousands of custom interactive dashboards.

While the IP would enhance nearly any retail-oriented AaaS platform, the suite's unique mix of capabilities in prospect targeting, member engagement, and provider network optimization make it particularly attractive to Medicare Advantage (MA) Plans and to the Data Processing, Consulting, Marketing, and Provider Data Management companies that service those Plans.

The table below uses current market size estimates from the Kaiser Family Foundation, Compound Annual Growth Rates from the Congressional Budget Office, and modest PMPM pricing assumptions to estimate the 2020 and 2030 Total Addressable Market (TAM), in constant dollars, for these capabilities in the MA space.

Medicare Advantage AaaS TAM		
	2020	2030
Members	22M	41M
Dollars	\$710M	\$1.33B

Tech talk

The Analytics as a Service Modules: The IP can be factored into four modules — Network, Sell, Survey, and Engage — that will enable companies to leverage the software to increase sales and member retention, while reducing wasteful, counterproductive utilization to enhance member well-being and loyalty.

The Data Science: The IP embodies calculations and predictive algorithms to evaluate internet leads, calculate drive time shapes, estimate provider trade areas, predict member defections, and much more. The algorithms operate on multidimensional data sets including geospatial, attitudinal, behavioral, and demographic features.

The Social Science: The survey application relies on peer-reviewed research to define, measure, and track the psycho-social and geo-demographic determinants of member health. Using a patent-pending methodology, survey items are mapped to operational and social science constructs implemented in the survey application as multidimensional latent variable models. The analytics are diagnostic and normative; they are designed to enhance the plan's impact on member well-being.

The Software: The underlying analytics and user interfaces were developed from the ground up for the non-technical user. The experience is elegant and intuitive with essentially no learning curve. The IP was engineered to require only minimal system integration. All HIPAA PII is maintained behind the MA plan (or plan processor's) firewall; the suite ingests only fully de-identified data. The core geospatial application is built with light, re-usable, modular components in the open-source stack: GeoServer, PostgreSQL, PostGIS, JSON. Python Flask APIs documented in Swagger and deployed in Docker containers. The database is simple, general, and extensible. Frontend in Open Layers, Vue.js, and Geo-JSON with Mapbox base maps. Deployment in AWS Vpc.



Features and Benefits of AaaS Products

	FEATURE	BENEFITS
<h2>NETWORK</h2> <p>Optimize network accessibility/convenience to improve the Member experience, increase sales and retention. Document network adequacy. Spatially-enable enterprise decision-making.</p>	<ul style="list-style-type: none"> Geospatial platform pre-loaded with Member, Prospect, Provider, and Community data; predictive models and optimization tools; intuitive UI with interactive maps, packaged reports, and comparative analytics Built from the ground up with non-technical business users in mind; designed to be exposed across the enterprise Select functionality from geospatial analytics platform accessed by directory and call center systems Simplified, Member-facing, spatially enabled directory UI Simple PostGres, PostGIS database architecture with JSON arrays; Python Flask APIs, documented in Swagger, deployed in Docker containers on the AWS Vpc 	<ul style="list-style-type: none"> Data from multiple domains to support network compliance/optimization, strategic planning, and marketing analytics Non-technical users can run custom maps and 'what-if' scenarios; shared mapping tools, data, and analytics provide enterprise-wide perspective on markets, constituencies and opportunities More timely and accurate directory; Customer Service call centers offer more useful Provider recommendations Allow Members to visualize their Provider networks and self-service appointment setting For developers, the system is modular, flexible and extensible; seamlessly add data sets, calculations, visualizations, and models; highly scalable to accommodate large data sets and new clients
<h2>SELL</h2> <p>Drive sales with precision targeting and messaging. AI tools for resource allocation; closed-loop analytics for attribution and accountability.</p>	<ul style="list-style-type: none"> Predictive models to target high potential Prospects; audience building tools to support social media campaigns Select functionality from geospatial analytics platform accessed by sales Lifetime Value model ensemble evaluates internet leads; simulation and optimization tools for sales resource deployment Use attitudinal, demographic, and behavioral attributes for cross-sell model to evaluate next logical product at the level of the Member Tools and protocols for A/B testing, sales effectiveness tracking, campaign attribution, and ROI analytics 	<ul style="list-style-type: none"> Get the right messages to the right Prospects to reduce acquisition costs and increase marketing ROI Geospatially informed sales allow telephone sales reps to demonstrate convenience/accessibility of network based on location of each Prospect More efficient use of ping/post auction; more effective deployment of sales resources to increase sales ROI Increase Member share-of-wallet: revenue and stickiness Data-driven resource allocation, transparent marketing, and sales accountability
<h2>SURVEY</h2> <p>Measure Member and Provider staff perceptions and attitudes.</p>	<ul style="list-style-type: none"> Automated application to collect, aggregate, and analyze attitudes and perceptions of Members and Provider staff Theory-driven; items mapped to latent variables with normative scores displayed in intuitive UI Data warehouse of survey and digital communications responses, attitudes, perceptions; stored at the level of the individual respondent 	<ul style="list-style-type: none"> Non-technical business users understand attitudes of key constituencies; built-in comparative analytics to discover bright spots and areas of opportunity Strategic planning framework: decision-makers empowered to make operational and resource allocation changes to improve the Member experience and drive Star Ratings Information to use in tailored messaging in the Engage Module
<h2>ENGAGE</h2> <p>Target loyalty and utilization communications to build retention and reduce avoidable, high cost, low impact, procedures.</p>	<ul style="list-style-type: none"> Segmentation and churn models to group Members and predict defections Predictive models combining claims, demographic, geographic, behavioral, and attitudinal data to flag clinically at-risk Members 	<ul style="list-style-type: none"> Retention specialists target outbound messaging and calls to reduce churn among Members at risk of defection Member engagement specialists develop segment-specific communication campaigns designed to "nudge" healthy lifestyles and refer Members for more in-depth behavioral health support; case managers focus prevention efforts on Members at highest risk for unnecessary, costly procedures

Pro-forma financials and Demo are also available with an NDA. For a more in-depth look into the opportunity, please contact Norm Gallivan, at (239) 250-5658 or by email at norm@njgallivan.com.