



TREEHOUSE TECH GROUP CASE STUDY.

Saving Time Through Smarter Data Management

Your
Data

Macro
Trends

Industry
Fundamentals



treehousetechgroup.com





BACKGROUND:

Starting in 2017, Treehouse Technology Group began working with Envision Healthcare, one of the nation's leading providers of healthcare services. Envision is a clinician-led organization that works with hospitals, health systems and payors to provide high-quality, cost-effective care. Envision's EmCare division in particular, provides recruiting and staffing services to hospital emergency rooms around the country, starting with the process of locating and qualifying talent, through to recruitment and retention. The organization's philosophy is that stable recruitment and retention practices improve patient care and value.

Envision approached Treehouse Technology to better streamline its recruitment and staffing division. With 1000 hospital partners nationwide, the organization was looking to simplify its reporting processes and gain valuable insight from its data. Together the two groups worked to create a data management and reporting application that brought Envision's operation into the 21st century.

Faced with severely outdated and inefficient existing systems, our partner engaged TTG to begin the process of defining a technology roadmap. The first step involved identifying the type of backbone system that they would need to carry out their aggressive growth goals. This entailed performing due diligence and analysis with subject matter experts on the existing and future processes, mapping out the current state environment of the business, and identifying either a best-in-breed or generic software solution that would carry them into the next decade. Once the due diligence was complete, TTG developed a future state technology roadmap to carry out the process.

Specific to our partner's financial advisory business, TTG was asked to derive a solution that would digitize their entire business by building a system automation process that would allow clients to open an account online and engage in transactions within their own portal. With a fully automated and integrated system, our partner would be able to rely on a rigorous auditing process that provides them with the visibility and accuracy needed to ensure transparency and regulatory compliance. Furthermore, the digitization process would provide them with greater data integrity and reporting capabilities, giving them the ability to understand where their data is coming from and mine it for valuable insights.

OUR PARTNER'S CHALLENGE:

As part of EmCare's business model, there's a heavy demand for reporting and analytics. They're responsible for managing hospital staff, recruitment and the onboarding process and regularly compile reports on the status of these various operations. The organization keeps track of an estimated one million data points from 1000 hospitals, including information such as, the number of shifts worked by doctors, the number of hours worked, how many doctors and nurses they place in a given hospital and how fully staffed or vacant the hospitals they work with are.



Tracking and managing the data is integral to their day-to-day operations, helping them to monitor staffing levels, open positions and the status of clinicians throughout the onboarding process. In addition to using the data as decision support, this data can also be mined in order to gain valuable insights that will allow the organization to improve its operations, decrease cost and find new areas of opportunity to investigate. For example, the data can be used to track recruiter performance which is used to determine quarterly incentive bonuses. Another example is how the data can be used to predict possible expense outcomes by determining whether the organization should utilize an outside agency to fill its shifts temporarily or to pay additional overtime to an existing resource.

Although the data collected on a daily basis was incredibly useful and actionable, the resource cost to compile and produce the reports had been very expensive and time consuming. Users were entering data manually into an Excel spreadsheet and the process of collating and formatting the reports was painstaking. In addition to being cumbersome and lacking in real-time functionality, the manual system EmCare was using was also prone to error.

TREEHOUSE TECHNOLOGY SOLUTIONS:

Treehouse Technology Group took a triage approach to addressing EmCare's needs. They began by creating a data model to structure the data in Excel into a relational database to give EmCare the ability to consistently input the data they needed for reporting purposes. It was an approach that allowed users to continue working in Excel while TTG began laying out a path for transition. This initial action alleviated a lot of issues for EmCare automatically while giving users time to adjust to a new system. It also gave TTG time to examine the organization's processes and work out any bugs. Next, TTG demonstrated to the stakeholders the value of automating their data efforts by using rapid-prototyping to show how fast and accurate their reports could be generated on a new system.



From there, TTG moved to beta testing the new system within a small division of the company and then rolling it out to the larger organization.

In the end, TTG built a full scale application and reporting engine that's currently being used across the company to track recruiter and manager performance. This includes a corporate dashboard and automated reports. All users can now login and get the information they need in real time. This warehouse database is responsible for all automated monthly reports and has eliminated the need for manual reporting, drastically lowering the resource burden. The application has also been custom tailored to generate reporting consistent with Envision's corporate branding standards and guidelines. This process has phased-out the need for a middleman to format the reports. Today, TTG continues to work with EmCare, providing 24-hr support to ensure the new system is running at peak functionality.

RESULTS:

TTG was able to take EmCare from three three separate reporting and data management conventions to one standardized-consistent convention. As a result of this effort TTG estimates the organization will experience an estimated \$100,000 in savings annually.

In the past EmCare spent between 12 and 16 hours on each report the organization produced. This amounted to upwards of 20 hours per week spent on reporting efforts. Now the system automatically generates reports with the click of the button provided by the real-time reporting functionality of the new system. This has eliminated the need for full-time staff to work on report generation and management. EmCare has also experienced a 90 percent reduction in its data discrepancy/error rate.

These improvements to EmCare's reporting processes have significantly changed the way the organization does business. The new system eliminates the need for costly manpower to generate the reports and ensures these reports contain accurate information in real-time. As a result, EmCare has freed up valuable resources for consumption elsewhere and is gaining insight that will increase efficiency and decrease overall costs.



VALUE-DRIVEN DATA SOLUTIONS.



treehousetechgroup.com