

YOUR TECHNICAL PARTNER

www.varteq.com

# ABOUT US



### EXPERTISE

VARTEQ is a technology consulting firm that offers broad range of solutions, from concept and strategy, to design, implementation, testing and support, helping clients achieve their business goals.

Enterprise Software Development

Unity3D for Cross-Platform 3D Games & Applications

Website Design & Development

Mobile iPhone & Android Application Development

Mobile & Facebook
Game Development

**Test Automation** 

Quality Assurance

Performance Tuning

## SERVICES

We support 3 engagement models that help clients meet their business goals and fit their operational and financial objectives. Each engagement model is cost effective and has a number of benefits.

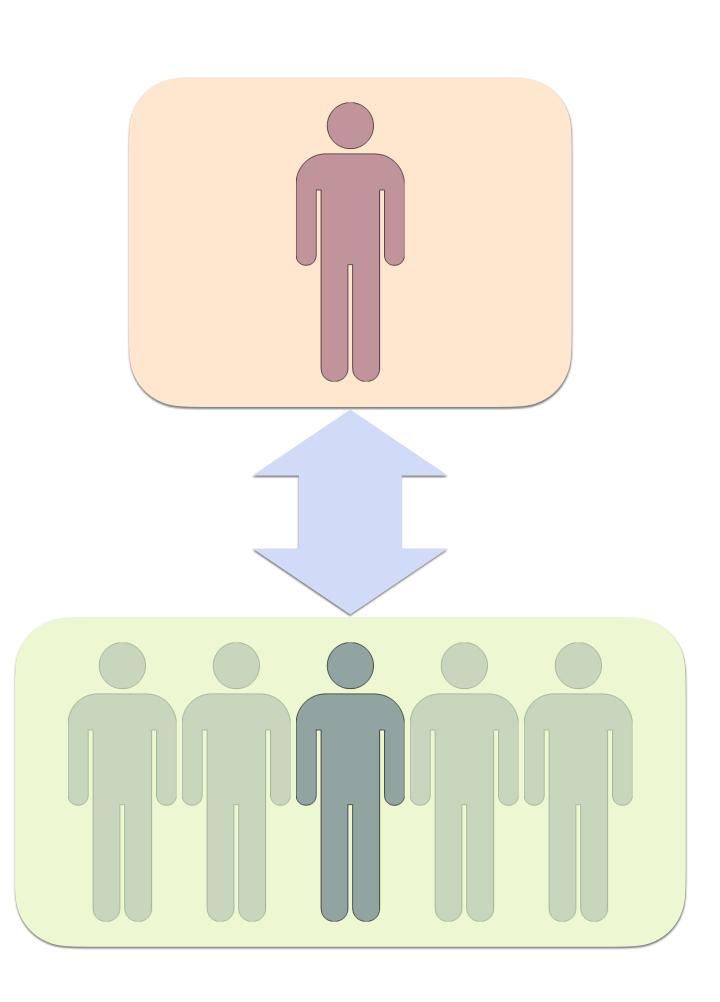
**Dedicated Offshore Team** 

**Team Extension** 

**Hybrid On-site / Offshore Team** 

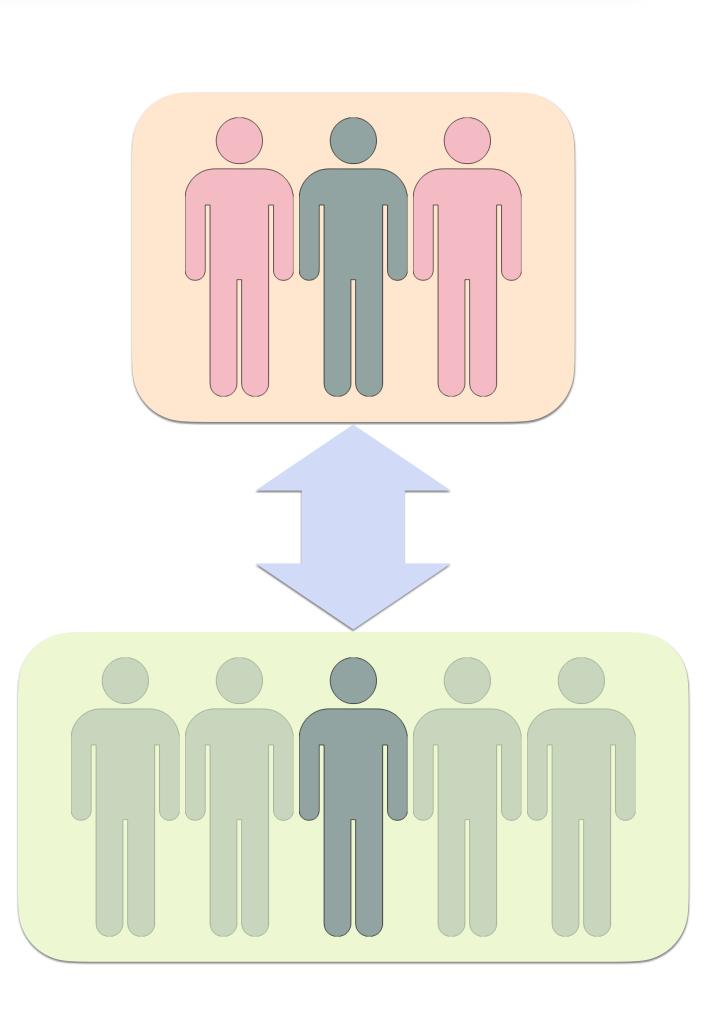
## DEDICATED OFFSHORE TEAM

- An offshore team of VARTEQ specialists is assigned to work exclusively on a series of client's projects.
- Project management is performed by the client through direct communication with dedicated VARTEQ offshore team lead.
- Offshore team adopts to existing client methodologies and best practices and may offer improvements upon request.
- · The model allows for a full scope control by the client.



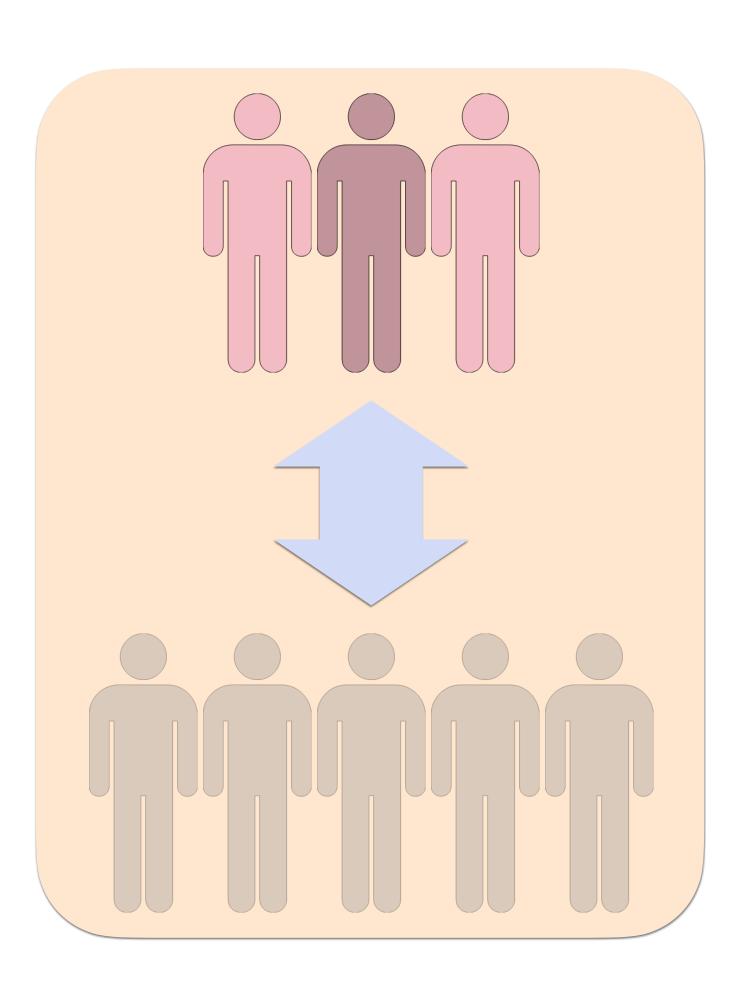
## HYBRID ON-SITE / OFFSHORE TEAM

- A dedicated team of offshore specialists is assigned to work exclusively on client's projects and is lead by an on-site VARTEQ leadership.
- On-site VARTEQ professionals help coordinate offshore team efforts and report to client's management.
- · Offshore and on-site professionals adopt existing client methodologies and best practices and may offer improvements upon request.
- The model enables even better communication between client and VARTEQ's dedicated team allowing for additional business expertise and knowledge transfer capabilities.
- The client retains full control over the team's activities with an option to delegate some of the daily coordination tasks to the on-site VARTEQ team leadership.



## TEAM EXTENSION

- Select VARTEQ specialists are assigned to augment client's team and to work exclusively on client's projects together with client's staff.
- · The combined team is lead by client's management.
- Highly skilled VARTEQ professionals offer valuable expertise to the combined team.
- VARTEQ specialists adopt to existing client's methodologies and best practices.
- The client has full control over the project.
- The model allows clients to temporarily expand their staff to achieve their business goals.



# PROCESS

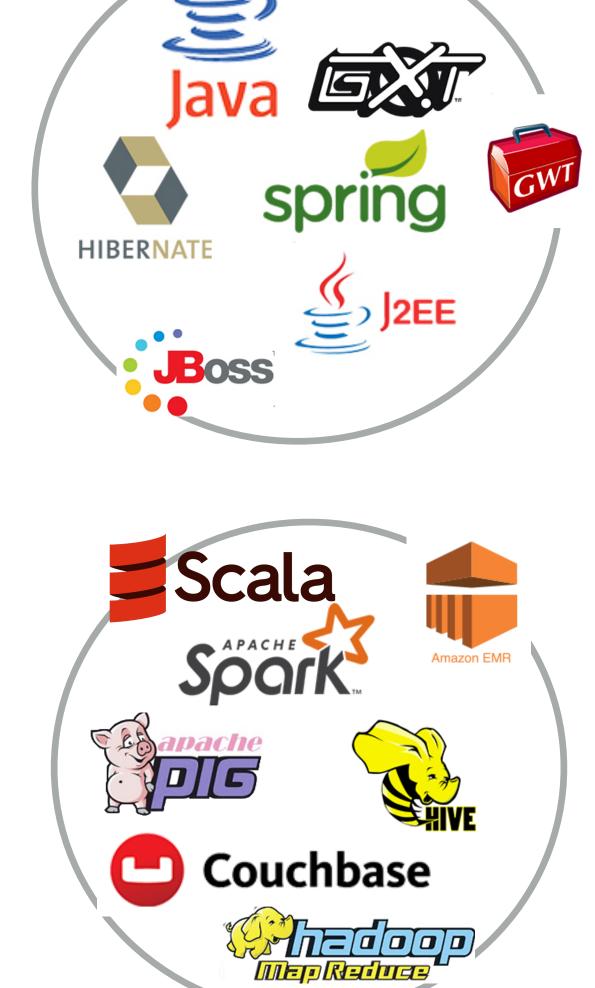
- · Agile development process.
- Daily SCRUM meetings.
- Weekly demos.
- · 2 week sprints.
- Test-driven development.
- Continuous integration.
- Adherence to coding standards.
- Knowledge transfer.
- · Constant communication over Skype and email.

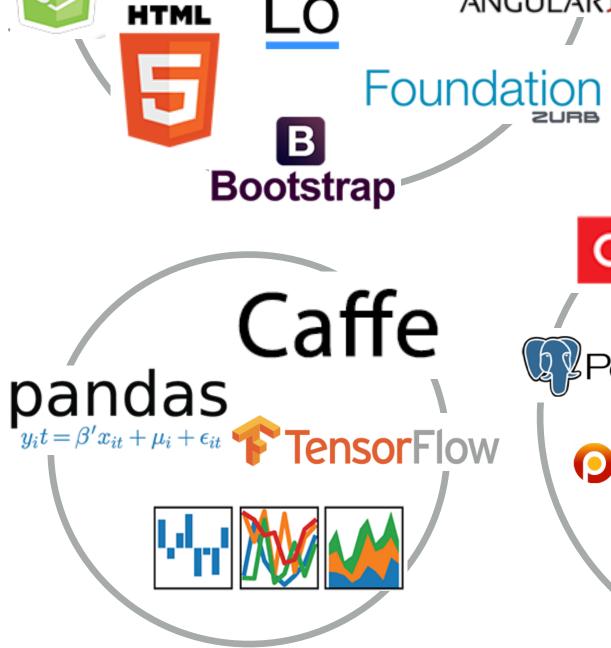


## TECHNOLOGIES

Knockout.

**ANGULARJS** 





BACKBONE.JS

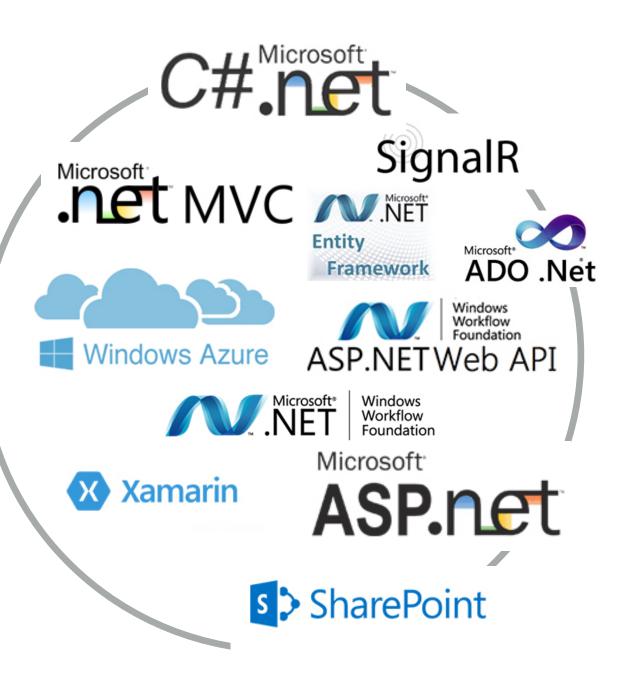
C55



python

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## INDUSTRIES



**Education & E-Learning** 



**Healthcare** 

SemanticMD

**QMENTA** 

**Automotive** 

Printing

Sepialine

Government

**○hio** 

Department of Taxation

InnerWorkings...

Travel

**SRBITZ** 

eCommerce & **Price Analysis** 





**Manufacturing** 



Fintech & **Trading** 





**Geographical** 

NAVTEQ



# CASE STUDY: Avatria - E-Commerce

### **DESCRIPTION**

Chicago-based independent digital commerce firm that provides B2C and B2B customers with high quality, innovative eCommerce solutions. Avatria specializes in developing modern digital commerce strategies, building new systems on leading platforms, and helping companies to evolve their existing processes and technology to support their long-term business goals.

#### **CHALLENGES**

To develop a tool that analyzes customers' behavior patterns utilizing machine-learning algorithms. To create a system that is integrated with the data providers and monitoring tools and efficiently predicts customers' behavior.

#### SOLUTION

VARTEQ has developed Cognito – the analytical system that gathers data and uses it for datasets generation and training of machine learning models, helping with product smart ranking and sales optimization. As a long-term trusted partner VARTEQ has been continuously developing, implementing, enhancing and testing the following:

- App-Services (Java/Spring/JAX-RS/JPA);
- Product lists export functionality (CSV and XLSX);
- Web Service Security (ensuring proper role and user checks are performed before service response);
- · Integration tests to ensure security validation for all web services;
- Profile and org images storage (app-services);
- Supporting memory clustering of app-services;
- Supporting cluster-wide event-based messages in app-services;
- Implementation of Twitter 'Snowflake'-like ID generator;
- GA Integration / Batch Processing;
- Assisting with ETL process steps implementation;
- Assisting with updates and refinements to existing GA integration jobs related to deriving clickstreams and metrics from GA exported data.











# CASE STUDY: Media Content Distribution

#### **DESCRIPTION**

US-based media services and technology solutions provider that prepares content for distribution to all digital media platforms (e.g. iTunes, GooglePlay, Hulu, Netflix), bringing content to over 200 platforms.

#### CHALLENGES

One of the features to be developed was a daily refreshed dataset of worldwide title availabilities correlated across retailers. It was necessary to manage vast amounts of information into easy to use filterable exception-based views, where data can be reviewed, analyzed and shared.

#### SOLUTION

VARTEQ has developed an exhaustive digital product aimed at digital content preparation and distribution. Video, audio, image, closed caption, or subtitle files — the product is prepared to manage, package, and deliver content for OTT, Mobile, and Broadcast markets, including the latest workflows in UHD and High Dynamic Range. The respective web-portal includes the following features:

- Orders processing and asset status tracking
- Handle assets origination
- Cross-retailer title availability and price parity
- Wide transcoding capability
- Built-in content security mechanism









# CASE STUDY: CarExchange - Automotive

### **DESCRIPTION**

CarExchange is a digital retailing platform for the automotive industry, helping car dealers work with their leads and engage more customers online. The solution converts a dealer's website into a full-fledged online store providing price negotiation tools to consumers and an effective way to capture leads to dealers.

#### **CHALLENGES**

From a consumer perspective, buying a car is often considered a rather stressful and time-consuming experience. Lack of digitalization of business processes at car dealerships pushed the need to find new ways to capture prospective customers who prefer online car buying experience.

#### SOLUTION

VAREQ has developed a digital retailing platform offered a software as a service (SaaS) to facilitate and enhance the relationship between car dealerships and consumers. This platform offers price negotiation tools, tradein valuation, upsells, customizable add-ons, finance & insurance products, document signing and delivery scheduling to customers. The platform enables the purchase to be made 100% online without going to the dealership. It is fully integrated with all major payment systems fitting both large and small dealerships. Features developed:

- Real-time lead capturing mechanism for car dealers;
- Price negotiation tools;
- Trade-in valuation tools;
- Digital paperwork and documents exchange;
- Personalized online GFD certificate;
- CRM and DMS integrations;
- Online transactions (deposits, warranties, test drives);
- Custom-tailored widgets;
- Statistics analysis and recommendations.













# CASE STUDY: Medical Laboratory Solution

### **DESCRIPTION**

A comprehensive medical diagnostic center and lab management software. The platform organizes live laboratory, genomic, and medication data into processable data at any scale needed.

#### CHALLENGES

Dissociated data, fragmented departments, and lack of process automation stand in the way of healthcare experiences personalized to an individual patient.

#### SOLUTION

VARTEQ has developed an integrated set of tools to support mobile health research, medical record integration and patient input into the research process. This allows for multidimensional insight into disease processes. The solution enables physicians and patients to utilize the abundance of digital data, from genome test results and clinical records to wearable sensor metrics and more. Currently, some of the features include:

- Collection of complex biological data from many sources, such as the genome, proteome, transcriptome, epigenome, and microbiome.
- Patient engagement
- Disease mechanism and biomarker discovery
- Develop, test, and maintain big data solutions to transform, aggregate, and abstract data into high-quality formats that are optimized for query and analysis.

















# CASE STUDY: Channel IQ Market Analytics

### **DESCRIPTION**

Channel IQ has established itself as a leading provider of eCommerce channel management solutions, serving more than 600 of the world's leading brands across nearly every major product category. In 2015, Channel IQ launched its new WTB platform that allows brands to engage their customers online, direct them to authorized retail partners, and closely monitor the results of these campaigns. In 2016 Channel IQ became a part of Market Track LLC, the leading provider of advertising, promotions, pricing, and eCommerce intelligence solutions.

#### CHALLENGES

Channel IQ was looking to update and improve the existing massive SaaS-based platform that gathers data for various multiple online channels.

#### SOLUTION

VARTEQ worked continuously on the development, testing and deployment of the following features:

- The concept of Minimum Advertised Price (MAP) monitoring was used alongside the Where-to-Buy (WTB) eCommerce solution;
- Combination of real-time pricing intelligence with fully managed compliance services that enable clients to automatically act on new information (e.g. how many items were sold through different channels and websites);
- The agents that gather intelligence from websites were developed on JavaScript using unexampled algorithms for data collection and analysis. The engine is a Scala-based Big Data processing tool.
- An admin panel enabling users to easily access and manage the reports.









# CASE STUDY: Follett E-Learning / EdTech

### **DESCRIPTION**

Designed for medium to large K-12 districts/schools, Follett Corporation helps store and centralize all information regarding students such as schedules, grades records, athletic eligibility and more.

#### CHALLENGES

Follett needed to have a system to be used by K-12 educational institutions to collect, organize, and analyze data related to students' academic performance and personal information, in order to manage day-to-day administrative and learning activities by schools and school districts.

#### SOLUTION

Aspen Student Information System (SIS) is a centralized platform for hosting and managing student data. Aspen SIS safely and securely stores data like class schedules, school events, student performance, athletic eligibility, individual health records, and much more. Aspen thus eliminates the need for multiple databases and streamlines the process of reporting student data, creating instructional plans, and applying state-specific guidelines. Aspen complies with numerous federal and local school regulations. It is hacker-proof and is able to serve large numbers of concurrent users without compromising the system's performance. The following features were created:

- Curriculum management
- Parent/Student Portal
- Reporting/Analytics
- Responsive Web Application











# CASE STUDY: LIMSys

### **DESCRIPTION**

LIMSys is an all-in-one, powerful and fully configurable tool to boost efficiency of medical laboratory operations by cutting down on manual tasks.

### CHALLENGES

Laboratory testing & research facilities have seen an exponential increase in the amount of data to manage, process and analyze. However, few laboratories can afford a traditional solution with a high price tag. In the past, the only alternative was to settle for a solution that sacrificed flexibility and completeness to save on cost. LIMSys is an affordable all-in-one solution to this growing sector.

#### SOLUTION

Built around independent modules that can interact with each other, LIMSys manages a variety of day-to-day lab functions, business operations, and information. Through LIMSys all relevant user roles can have access to respective lab data, manage their patients'/customers' lab work, assign tasks, monitor performance and execute managerial and administrative functions from anywhere, through web and mobile applications.

LIMSys allows you to actively manage your entire lab process from instrument maintenance and samples to people and consumables. A LIMS manages laboratory samples and associated data, standardizes workflows, reduces human error and increases efficiency. Functionality includes:

- Lab inventory management
- Electronic laboratory notebooks (ELN)
- Billing information management
- · Customer's order/case management





















# CASE STUDY: C.O.S.

#### **DESCRIPTION**

VARTEQ's fully-integrated platform to simplify patient engagement and the entire range of medical practice operations including scheduling and billing.

#### **CHALLENGES**

Traditional approaches encompass paper-based information processing, manual revenue cycle management, disjointed data, poor missed appointments management, slow procurement and many more.

C.O.S. was developed by VARTEQ as a response to common pain points and bottlenecks faced by small and mid-size clinical practices in their daily operations.

#### SOLUTION

C.O.S. serves as a holistic platform to cover all the needs that a smallto-medium medical establishment might have. It helps to restructure revenue cycle management by including a myriad of new capabilities, such as data analytics, quality and cost performance monitoring, and care standardization. C.O.S. is HIPAA compliant for the secure transfer of data. The C.O.S. platform helps you to be aware of revenue streams, patient records, and other critical metrics in real-time at your fingertips. It can be installed either on-premise or be used as a cloudbased solution to be accessible both on-the-go and from the office. Some of the core features:

- Patient management
- Medical billing
- Reporting and analytics
- Patient engagement

















# CASE STUDY: Data Dazzler

### **DESCRIPTION**

Data Dazzler offers a wide range of available data anonymization algorithms, explained for non-expert users in a nontechnical language using examples, ensuring the usage of state of the art confidentiality models that mitigate attacks and privacy breaches.

#### CHALLENGES

Getting anonymization right is very complex. In healthcare, free-to-use software designed to protect and mask PHI (Protected Health Information) is far from being the best choice because anonymization has to be heavily tailored to the use case and meet numerous government standards. On the other side, doing data anonymization manually is slow and error-prone.

### SOLUTION

Data Dazzler anonymizes personal data in such a way that the data no longer has a concrete personal reference but is still useable. This method fulfills the official requirements of general data protection, HIPAA and GDPR.

Data anonymization and masking is a part of our holistic security solution which protects your PHI data wherever it lives—on premises, in the cloud, and in hybrid environments. Data anonymization provides security and IT teams with full visibility into how the data is being accessed, used, and moved around the organization.

The four approaches to anonymization that Data Dazzler uses are:

- Data masking
- Pseudonymization
- Data swapping
- Synthetic data









