

DIGITAL CONSULTANCY

CAPABILITIES & APPROACH

COMPANY INFORMATION

MODEA

 117 Washington St. SW Blacksburg, VA 24060

\$ 540, 552, 3210

BRYCE CANNON

PRESIDENT

⊠ <u>bryce.cannon@modea.com</u>

\$ 202. 258. 2274

CHRIS RIEGGER

CHIEF OPERATING OFFICER

646. 896. 4738

About Modea

Healthcare consumers expect seamless digital experiences. They want to tap, swipe, and click, using one hand and in real time—without backtracking. If your healthcare organization doesn't provide that kind of experience, from initial appointment scheduling through the final bill, your patients might go elsewhere, even if the care isn't as good.

At Modea, we solve this problem for healthcare organizations by doing two things: (1) consulting with them to develop a strategy for providing their customers with this experience, and (2)



engineering, designing, and integrating the digital tools that make the experience happen.

If your customer experience is outdated, it will cost you business. We can help you stay competitive and relevant in the current age of the mobile consumer, whether your marketing team has a clear picture of what to do, or you need an expert to help you develop a digital transformation roadmap.

Why this work?

We do this consulting and development work because we believe that digital tools should help healthcare consumers have more choice, be more in control, and enjoy greater transparency.

Healthcare organizations that integrate these tools and create well-thought-out, empowering customer journeys will thrive.

We want to help you thrive.

How we do it

We've brought the best practices to healthcare from the industries that most understand and cater to consumers.

Why shouldn't finding a doctor be as easy as comparing flights with Kayak, and booking an appointment online be as easy as reserving a car with Uber? This question guides us each day as we help our clients with their digital transformation. Our clients may not know the ways in which they need to transform, but they do know something isn't working, either because patients are leaving for competitors, or because teams inside the organization are exasperated with outdated technology that hampers their ability to help the institution grow.

We use data about consumer behavior as the basis for any recommendation we make to an organization. We conduct our own research and have a specialized data analytics team that can pinpoint what your customers are doing (and what they are not doing). For organizations that need buy-in from key stakeholders, this kind of data can move and motivate like nothing else.

Our Team

We are data scientists, engineers, designers, and strategists who understand consumer behavior and the way people engage with the latest digital tools.

We've spent over a decade building digital assets that deliver consumer value and increase revenue and growth for our clients. We are leaders in healthcare— precisely because we didn't start in this industry. Our experience in spaces like telecom, entertainment, and insurance has allowed us to bring the best practices to healthcare—an industry we specifically chose because we feel it's where we can make the most impact.

We don't save lives ourselves, but we do give the right digital tools to the folks who do. Creating fantastic digital experiences for healthcare consumers actually makes for healthier, happier people all around.

SERVICES

We offer two main services: Strategic Consulting and Design/Build

Strategic Consulting is for healthcare organizations who recognize their digital experience is not what it could be, but they aren't sure what to do. Strategic Consulting provides you with a digital transformation roadmap, based on research, data, and insights about what your customers are doing, how they are consuming healthcare, and what technology and tools will best meet their needs and your business objectives.

(In six words: We tell you what to build.)

Design/Build is for healthcare organizations that need a partner to help them design, develop, and integrate the digital tools that will keep them relevant in this age of the mobile consumer. Design/Build includes custom builds that are specific to what your organization needs, from complete website overhauls (back-end functionality and front-end design) to mobile apps.

(In six words: We build the things for you.)

Within each service, we have a menu of sub-services. Don't know which of these services you need? Don't worry. It's our job to advise you on which ones are best suited for your organization.

Strategic Consulting Services

Technology Selection

Key question we help answer: How can we be sure we're selecting the best possible technology for our organization and customers?

We help you select the right technology to support your organizational goals, whether you need improved site search, a more robust content management system, or any number of other objectives. As an outsider to your organization (but an insider for the healthcare industry), we provide you with objective answers. Because we use a proprietary matrix and process for scoring, our decision is based on research and insight, versus simply following what everyone else is doing.

Outcomes: Unbiased decision making and stronger organizational value from new technology.

Digital strategy consulting

Key question we help answer: How do we stay relevant for today's mobile customer?

We help you map and understand your customer's journey, identifying any pain points and gaps in those journeys. Based on our strategic analysis and insight, we help you determine which digital solutions can best address those gaps.

Outcomes: A digital roadmap based on what your customers truly want and need.

Analytics and data science

Key question we help answer: How can we use data to make better decisions?

We analyze your data, and then we show you how to analyze your data, so that you can use it to measure the effectiveness and success of your digital tools. Our data science team is trained in statistical modeling, machine learning, and predictive analytics. We build data-based models to score leads, make predictions, and address a host of other business objectives to generate revenue or cut costs.

Outcomes: Improved ability to make strategic decisions and calculate ROI.

Audience and user experience research

Key question we help answer: Where are our customers getting stuck?

We hire skilled, NNG certified researchers that understand the healthcare consumer and can structure the right research project to help you understand your consumers, identify pain points in your user experience, and gain the insight necessary to prioritize a roadmap. Most legacy healthcare systems are heavily siloed, and the user experience is fragmented and frustrating. We show you where it falls apart, and where the opportunity for connecting the dots is.

Outcomes: Better understand your audience, so you don't waste resources on the wrong solution.

Design/Build Services

Design

Special sauce: Extensive healthcare experience and the ability to understand the nuances of creating digital platforms that support the care journey.

The best design is grounded in data and based on a clear strategy. That's why our UX/UI design team both leads the user experience research and creates the visual design that users interface with. We complete the loop, so that you can provide a digital experience that allows your organization to stay relevant and competitive. Understanding your end customers and their needs and pain points is baked into how our designers work.

Outcomes: Design that solves problems and focuses on giving your customers more choice, more control, and more transparency.

Mobile apps

Special sauce: Engineers who bring the best practices in mobile apps to the healthcare industry.

We believe that a mobile app strategy is an important part of a strong, consumer-oriented digital roadmap, especially as more consumers look to their smartphone as the primary way to access digital content. Healthcare organizations have a tremendous opportunity to meet consumers' needs with targeted mobile apps.

That said, a mobile app should serve a specific purpose and provide tangible user value. Our design/build team works with healthcare marketers to develop apps that bring value to consumers or inside a B-to-B environment. We have experience both in native development for iOS and Android, as well as cross-platform frameworks (such as React Native, Ionic, NativeScript, Xamarin, and others).

Outcomes: HIPAA-compliant mobile apps that serve a strategic purpose in your overall digital experience.

Drupal development

Special sauce: Extensive experience building enterprise healthcare websites using Drupal as the content management system.

More clients are coming to us requesting Drupal as their CMS. As an Acquia partner, with three Acquia Drupal certified software engineers on the team, we bring expertise to the process of building on and running Drupal, including experience with native Drupal theming. That's true whether your site requires module configuration or custom module development.

Outcomes: User-friendly, mobile-friendly websites that center on what healthcare consumers need—while offering an intuitive, customizable CMS for your team.

WordPress development

Special sauce: Ability to customize WordPress sites, keeping in mind the needs of healthcare organizations.

For certain healthcare marketers, WordPress is an ideal content management system, and we are able to make the most of this versatile CMS. On the front end, we can turn your design and interactions into performant HTML, CSS, and JavaScript. We can also do extensive plugin development, building custom plugins, themes, and integrations that meet the needs of your site. Our team has experience with multi-site development as well, essentially building a network of related websites that can come from a single WordPress installation.

Outcomes: Fully-functioning, highly-customized sites that run on WordPress platforms, are easy for marketing teams to manage, and guide users seamlessly through a digital experience.

Custom software development

Special sauce: A technology-agnostic software engineering team with deep experience across a host of enterprise platforms, frameworks, and programming languages.

Our clients often come to us with problems that can only be solved by building a custom software application. In this case, we focus on using common frameworks and platforms (such as Angular, React, .NET, PHP, and Ruby) that align with the long-term goals of our client's organization. We also develop APIs to help you better serve your customers by giving them seamless, easy-to-use interfaces.

Outcomes: Custom, strategic web-based software solutions that either integrate with your overall digital experience or stand on their own, to solve a specific problem.

Electronic health record integration

Special sauce: True software engineers with deep expertise in the intricacies of integrating electronic health records.

Integrating digital tools with electronic health records is often part of a larger engagement, but we also take it on as a specific project. Many healthcare organizations have a goal of linking EHRs with consumer-facing applications to be able to offer tools like online scheduling, bill pay, and seamless integration with wearables. But they get stuck, because it's complicated. This is where we shine, and it truly sets us apart. We have experience with all major players in the EHR space, including Epic, Cerner, and Athena. We also partner with Redox to help customers on their platform fully integrate EHRs with their other applications.

Outcomes: EHR-linked tools such as online scheduling and registration, bill pay, and integration with wearables that help healthcare organizations truly transform their digital experience.

CASE STUDIES

CLIENT LIST























Keck Medicine of USC



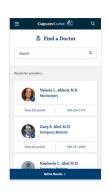
CARILION CLINIC

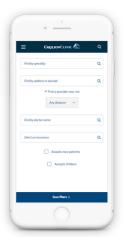
CHALLENGE

Carilion Clinic, an academic medical center in Roanoke, Virginia that provides care to nearly 1 million people in the state, was losing ground to both regional and national competitors because of their outdated digital experience. Patients couldn't schedule appointments online, and the majority of mobile users (which accounted for almost 60% of all visits) were presented with a challenging mobile web experience that often led to dead ends.

SOLUTION

We built a patient-first, mobile-friendly experience, using Drupal as the CMS. We focused on key transactions, including find a doctor, find a location, and pay a bill. We also created personalization based on previously viewed content, to streamline visits for mobile users.







TECHNOLOGIES USED









ACCESSIBILITY AA

OUTCOMES

By improving the mobile experience pages load 27% faster, for example we helped Carilion increase mobile engagement by 25%. These improved interactions have helped to drive revenue for Carilion, who is regaining some of the ground they were starting to lose to competitors. In fact, website user retention is up 35%.

+27% **MOBILE PAGE** LOAD SPEED

+25% MOBILE **ENGAGEMENT**

+35% **USER RETENTION RATE**



Gold Award Mobile Site - Best Practices



Silver Award Mobile Site - Best Practices Mobile Site - Best User Experience



Gold Award Best Mobile Website



Excellence Award Mobile-First Website

JEFFERSON COLLEGE OF **HEALTH SCIENCES**

CHALLENGE

Jefferson College of Health Sciences, a full-service healthcare academic institution training professionals in nursing, physical therapy, public health, and many other programs, was not meeting program admission goals across platforms. JCHS's site was inundated with content and prospective students too often left the site in frustration, unable to apply online or make their way through the site. Mobile users in particular—which our research showed to be one-third of all users—had a high bounce rate. Users were more likely to start critical funnels on their smartphone, but would then drop off when they couldn't complete them.

SOLUTION

We created a user-friendly, mobile-first experience using Drupal as the CMS, with research and data from discovery driving every decision with design. We designed interactive comps and put them directly into the hands of users. Our designers catered the new site's design to each persona's user journey, and focused on speed, simplicity, and functionality.

TECHNOLOGIES USED







ACCESSIBILITY

AA

OUTCOMES

Our team helped ICHS consolidate 11,000 pages of content to 2,400 pages of content, making the site significantly easier to navigate. We also decreased the average page load time by 33 percent, so users were able to access content more quickly, and get where they needed to go without frustration.



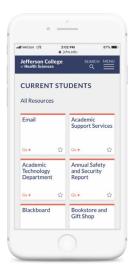
Our team helped **JCHS** consolidate 11,000 to 2.4k pages of content.



33% **DECREASE** Average Page Load Time Per Session









Gold Award

Website - Schools/Universities



Silver Award

Website - Best User Experience



Gold Award

Best Mobile Website **Silver Award** Best Internet Home Page

Distinction

Best Site Design

MONROE CARELL JR. CHILDREN'S HOSPITAL AT VANDERBILT

CHALLENGE

A leading pediatric hospital, <u>Monroe Carell Jr. Children's</u> <u>Hospital at Vanderbilt</u> is part of a large, complex organization at Vanderbilt University Medical Center

(VUMC). As such, the marketing team struggled to effectively manage content across the children's hospital website and all of its other web properties. In addition, the children's hospital website was outdated and presented a challenging user experience that wasn't in line with VUMC's status as a sophisticated academic medical center.



SOLUTION

We implemented a Headless CMS on Drupal 8. Rather than have content siloed within various CMS instances, we designed and built a singular back-end CMS that functions as a repository by hosting all content for all sites. This technical breakthrough unifies content and provides a seamless experience for users who unknowingly travel across the various Vanderbilt sites and platforms to book an appointment, pay a bill, and more. The VUMC marketing team can now repurpose one piece of content across multiple sites. A content manager simply checks a property box in order for a piece of content to appear on a particular site or sites to support multiple consumer journeys.

Locations and Directions March by rice of 10,000 or 10,

OUTCOMES

We were able to seamlessly integrate more than 1,700 physician profiles across three Vanderbilt sites, with minimal content management required. The site provides a better experience for users, and it's easier for marketing team to manage.



Platinum Award

Best Mobile Site
Best Internet Home Page
Best Doctor Directory
Best Overall Internet Site



Now, over **1,700 physician profiles** are seamlessly integrated across **three Vanderbilt sites** with minimal content management required.

TECHNOLOGIES USED





ACCESSIBILITY
AA

DUKE HEALTH

CHALLENGE

Duke Health was fighting for their share of patients in the Greater Triangle of North Carolina, losing out to competitors like UNC, Wake Forest, Novant, and Rex because of a digital experience that didn't cater to the patient. Our research showed that while patients with serious health issues regarded the Duke brand as premium, Duke was losing market share in primary care and more routine services. Duke's website was organized by department, which catered more to the doctor than the patient. They had also invested in a large health library hoping to lure patients in using content about illnesses and their related symptoms. Overall, they needed to deliver a digital experience to patients that quickly catered to their needs and yielded better volumes for the organization.

SOLUTION

All of our experience and research pointed to one critical need: Simplify

the site and focus on the critical transactions that consumers needed to do most. To do this, we looked to other industries like ecommerce to understand and apply broad best practices for helping consumers to "convert." In doing so, we created a deep decision platform for one of the nation's leading academic hospitals.





TECHNOLOGIES USED







ACCESSIBILITY AA

OUTCOMES

Because the site design is clear, compelling, and most importantly, helps consumers more easily make critical decisions like finding the right doctor or choosing a treatment path, several key metrics are up. Outpatient visits increased by 20%; appointment call volume is up 25%; inpatient admissions are up 37%; surgical procedures have increased by 47%. Overall, Duke saw a 350% ROI on marketing.

Post Launch Results 2013 - 2014

350% ROI ON MARKETING SPEND

20%
OUTPATIENT
VISITS

25%
APPOINTMENT
CALL VOLUME

37% INPATIENT ADMISSIONS



'Silver' Category 2017, Healthcare System

VANDERBILT-INGRAM **CANCER CENTER**

CHALLENGE

Vanderbilt-Ingram Cancer Center (VICC) was quickly falling behind in digital best practices. Focused heavily on research and innovation, VICC needed a site rebuild and CMS overhaul in order to better manage content creation and deployment for the end user. In addition, the small, non-technical VICC team needed the ability to easily create new pages across the site, with as close to a "drag-and-drop" experience as possible.



SOLUTION

Using Drupal as the CMS, we built custom templates for each component within pages on the site. We used Pattern Lab, and trained the VICC team on how to use it (documenting which patterns create any given component). The VICC marketing team can also rearrange content and make new pages simply by dragging modules to locations on a page. This à la carte approach allows a content manager complete control over the content displayed on the site. For example, on a physician profile page, publications, awards, and credentials can be displayed in different locations on the individual pages.



OUTCOMES

Not only is the new site easier for VICC to manage, it's also a more seamless experience for users, and keeps them better engaged. VICC has seen a 41% increase in average session duration and 20% more content has been viewed. Also, 1 out of 5 users searched for a clinical trial, which is an important metric for VICC because they are a leading cancer center that does innovative research.









ACCESSIBILITY AA

41% increase AVG. SESSION **DURATION**

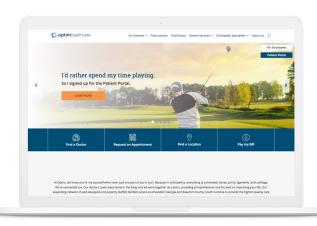
20% MORE **CONTENT VIEWED**

1 OUT OF 5 **USERS SEARCHED** FOR A CLINICAL TRIAL

OPTIM HEALTHCARE

CHALLENGE

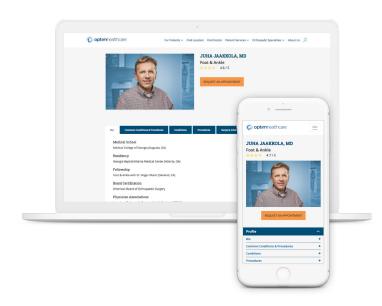
Optim Healthcare lacked flexibility and control of its primary marketing tool. The organization's content and design mirrored that of its siloed departments. Optim partnered with Modea to design and develop a user-friendly site that better caters to both the internal marketing team and the end consumer.



SOLUTION

Optim's website neither met basic user experience healthcare standards, nor allowed the internal team to create content without a 3rd party consultant's assistance. Our design team began reimagining the site by restructuring information architecture and consolidating subdomains and microsites all under one roof. Through the implementation of WordPress, the marketing team, of one, transformed into a fully functional content management powerhouse.

This flexible and secure content management solution now provides the internal team with better marketing and SEO tools, while at the same time delivering a high-quality, intuitive customer experience through a responsive and easy-to-use design.



OUTCOMES

80% INCREASEin user sessions

507% INCREASEin provider profile engagements

TECHNOLOGIES USED









ACCESSIBILITY
AA



Merit AwardWebsite - Health/Medical Services

FOOT LEVELERS

CHALLENGE

Foot Levelers, the world's leading provider of individually designed orthotics, was struggling to maintain their foothold at the top of the custom orthotics market. Their competitors were quickly catching up to them by offering innovative technology solutions to increase the volume of foot scans from their main customers, podiatrists. Foot Levelers approached Modea to build a tablet based application to not only catch up, but also surpass competitors by delivering a best in class experience to their customers.

SOLUTION

Our research showed that orthopedic physicians and podiatrists desired an easy-to-use and on-the-go experience compared to the conventional, bulky machine that was confined to the office.

Modea studied industry best practices and existing customer feedback to deliver a convenient and intuitive user experience that seamlessly captures 3D foot scans needed to create custom orthotics. The iOS app integrates with the STRUCTURE sensor, a piece of 3rd party hardware that captures the high quality 3D scans. Additionally, the app integrates with Foot Levelers' transaction platform to enable fast and seamless order fulfillment.

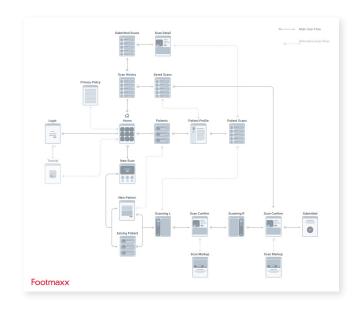
ACCESSIBILITY





TECHNOLOGIES USED

Follows Apple's accessibility guidelines





OUTCOMES

The app was approved by Apple, and simply by offering it to users, Foot Levelers has already acquired several new clients they were having trouble converting before.

EDISON

CHALLENGE

Technology Services Group (TSG), Carilion Clinic's IT organization, was confined to specific, outdated design by its legacy service management platform HP Service Manager, which they branded as MyTSC. The app's limited functionality overwhelmed the helpdesk, frustrated employees, and created organizational inefficiencies. TSG approached Modea to reinvent their service management process by creating a tool that better supports their use of the ITIL framework.



SOLUTION

Our team held a series of focus groups to isolate roadblocks and identify pain points within the current application and process. It quickly became clear that users desired a simplified workflow and the ability to use common mobile device features like camera integration, tool tips, swipe navigation, barcode scanning, and more.

The new mobile application's design offers users (Carilion employees) a modern interface for submission of incidents and a robust middleware layer that allows for seamless integration with new and existing back-end platforms.



TECHNOLOGIES USED









OUTCOMES

Edison delivers the same clear and concise user experience in both desktop and mobile environments.



Doubled the number of online requests leading to a reduction in service desk call volume.



Camera integration allows for a quick and easy upload process which extended the value of the app to clinical engineering use cases.

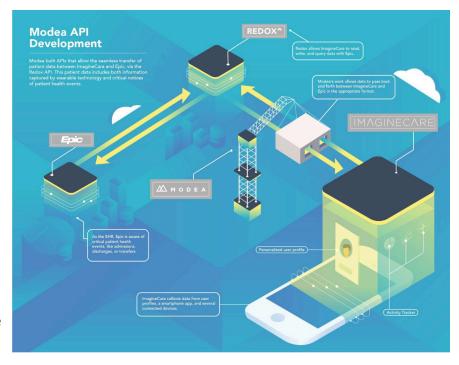
DARTMOUTH-HITCHCOCK - IMAGINECARE

CHALLENGE

For decades, the fee-for-service payment model directly contributed to the rising costs of healthcare. Dartmouth-Hitchcock, an academic medical center based in New Hampshire, partnered with Modea to provide an innovative solution to help address patient health in a new way.

SOLUTION

In order to disrupt the traditional feefor-service model this new solution focuses on providing a customer centered experience in which healthcare is delivered directly to the consumer's doorstep. ImagineCare revolutionizes



the delivery of healthcare through leveraging wearable technologies with remote sensors to gather real-time data; keeping patients in constant communication with their care teams.

ImagineCare worked with Modea to develop and integrate APIs to request and push patient data back and forth between EHRs and ImagineCare. This way, important patient data, such as health information collected by wearables, can be shared across both the ImagineCare platform and Epic as the EHR. This gives the entire care team a more complete picture of the patient's overall health and helps to make informed decisions about patient care, ultimately increasing value and improving clinical and financial outcomes.

TECHNOLOGIES USED









OUTCOMES

Convenient and personalized, ImagineCare empowers patients to better manage their own care, improve overall population health, and (using the latest technology) reduce the cost of providing great healthcare.

MANATEE HEALTHCARE SYSTEM

CHALLENGE

Universal Health Services (UHS) aimed to drive loyalty with current and former patients for one of its regional healthcare systems, Manatee Healthcare. UHS partnered with Modea to build an iOS mobile application that enhances location search based on desired services from the palm of the patient's hand.

SOLUTION

Over the past decade, the mobile user population has not only grown exponentially, but also expects more from legacy healthcare providers. With healthcare consumer trends and expectations at top of mind, Modea's design team brought out of industry mobile best practices and seamless UX design to life in Manatee's MHCS mobile application.

We transformed the traditional "find a location" process through a sleek, simplified design that highlights the main call to actions via user-friendly UX components. The new "find a location near me" feature quickly delivers a list of nearby Manatee Urgent Care and clinic locations from which a consumer can easily book an appointment. Finding the right location based on proximity and specific condition is now easier than ever.

TECHNOLOGIES USED

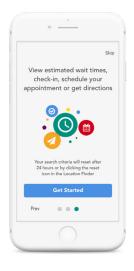


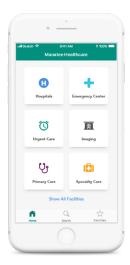
::: DOCASAP



ACCESSIBILITY

Follows Apple's accessibility guidelines







OUTCOMES

Now, patients can quickly schedule an appointment and find nearby amenities like restaurants and gift shops from on-the-go. Rated 5.0 stars











www.modea.com