



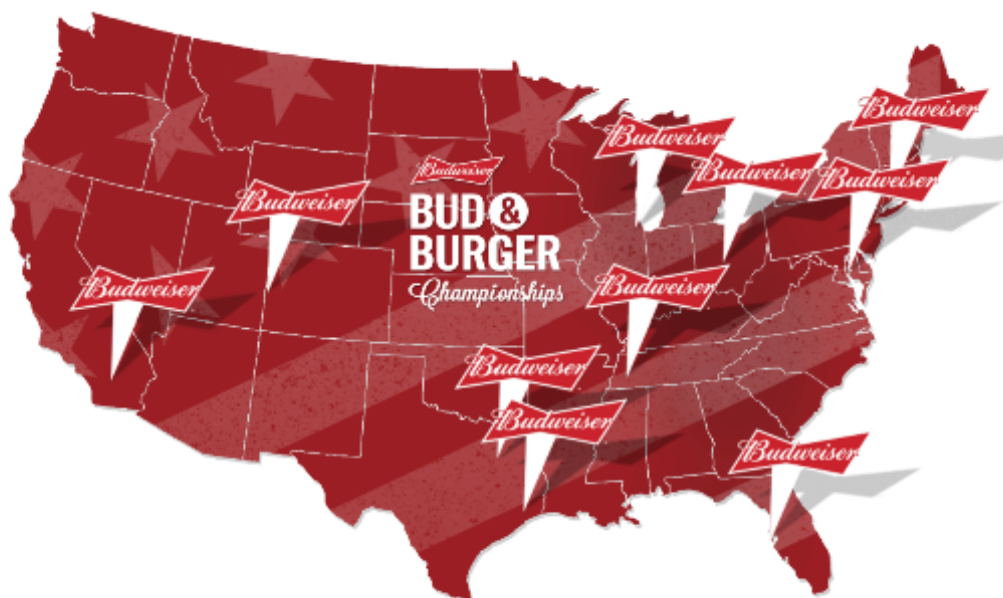
Node.js Everywhere

Fusion Creates Memorable Digital Experiences with Node.js



What does Fusion Marketing do?

Fusion Marketing is a St. Louis, MO-based event marketing firm. Fusion specializes in creating custom interactive experiences - increasingly with a major digital component - that their clients' customers will remember. For instance, Fusion Marketing partnered with Budweiser to execute the nationwide Bud & Burger Championships to find America's next great burger chef. Nearly 70,000 consumers enjoyed a Bud, burger, music and fun with friends in this campaign, which also drove an estimated 10 million social media impressions.





Digital Takes Center Stage

When Brad Harris started the digital practice at Fusion in 2013, the team was focused mostly on web sites and some phone apps.

Then it happened.

While creating an API for a customer's phone app, the team discovered Node.js and fell in love.

Over the past year, Lead R&D and Senior App Developer Keith Chester has spearheaded the team's digital expansion to "physical builds," meaning the Fusion team creates things that don't exist for their clients' events. Node.js has powered the team's expansion from developing app APIs to a 360° physical interactive group.

Some examples of Node.js-powered digital experiences the Fusion team has recently built include Twitter activated devices (such as vending machines), on-site voting systems (via SMS or push button), photohunt and trivia games, numerous phone apps, microservices to ease Fusion's reusable development practices, bartending bot, RFID Nerf War, and dozens of Node.js powered kiosks.

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Describe a “typical” client project?

“We typically don’t have a lot of time from the initial brainstorming session with the client to when the event takes place,” said Brad Harris. “A long timeline for us is 7-8 weeks. Given this, the ability to iterate and get a proof of concept mocked up really fast for the customer to respond to is absolutely essential. Node.js and JavaScript are key enablers for us to be able to do this.”

“Our clients – brands like Anheuser Busch, Bosch, Valvoline, CVS, Purina - want to do more than deliver messages to consumers via the spoken and written word,” added Grant Stif, Fusion’s VP of Business Development. “They want their customers to experience their brand. Fusion Marketing partners with clients to create custom interactive physical environments that customers remember.”

For example, one retirements savings client wanted to go beyond an interactive tablet app to show consumers how jumping into and out of the stock market was unlikely to outperform a disciplined, “buy and hold” strategy. Fusion used Node.js to create an interactive environment where people physically jumped onto a mat that represented a certain point in time. Node.js running on the mat and on the server drew actual stock market data from that point in time. When the investor jumped off the mat, this triggered another database call and the person’s investment performance was calculated and presented.

How does Node.js help you make these sorts of experiences for your clients faster/better than other technologies?

“For us, the fact that Node.js and JavaScript were designed to be eventive languages – to respond to events or inputs in the browser – makes them perfect for the front end, back end and device side of our interactive physical builds,” said Chester.

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Specifically, Node.js gives the Fusion team the confidence to:



- A. *Know that they can accommodate just about any scenario a client might dream up;*
- B. *Know they can prototype and build it quickly;*
- C. *Maintain very high functional predictability – e.g. they know how the application will behave.*

Another factor for the Fusion Marketing team that makes Node.js and JavaScript the right technology is staffing. Even though finding developers with significant Node.js experience is still a bit tough, Fusion has had great success onboarding interns from LaunchCode who have been exposed to JavaScript. "With minimal training, these developers are able to quickly use Node.js to get a web server up and running and, from there, they can expand out to APIs, devices and front end," said Chester. "Were we to use Java or Ruby for many of our projects, that learning curve would be much steeper."

Another benefit of Node.js for Fusion is they can get a new project built very quickly. Because Node.js offers a high degree of freedom in how to approach any given problem, it helps the Fusion team get up and running quickly.

"Node.js allows Fusion to build new projects quickly due to its high degree of freedom in how it approaches given problems. Getting up and running quickly is key to Fusion's own success and to that of their clients."

What's on the Node.js horizon that excites you?

Looking towards the second half of 2016 and into 2017, the digital team at Fusion see two big ways Node.js will help them continue delivering memorable experiences for their clients' customers:

1. Microservices

The fast turnaround time and short term nature of their projects means that anything they can do to speed up delivery will reduce cost and allow them to serve more clients. The team is building out their own internal microservices network for a lot of common tasks that they can plug into repeatedly, which will help shorten their development cycles even further.

2. IoT

The increasing prevalence of Node.js as a native, first class citizen on a embedded devices will make their jobs much easier. Strong community support to integrate Node.js onto more boards and devices will give the Fusion team even greater control over the devices.