mercuryworks

CHOOSING A PARTNER FOR YOUR APPLICATION DEVELOPMENT PROJECT

Investing in a custom application for your business is an important decision, and it's even more important to choose the right development partner. With thousands of firms in the market and even more freelancers, it can be difficult to know which are legitimate and able to deliver the high-quality application your company needs for mission-critical operations...and which are lacking in what it takes to carry the day.

Thankfully, there are some criteria that you can use to evaluate the strength of your potential partner. Having a set of guidelines can be helpful as you interview and weigh potential partners based on competency, business practices, and the ability to add strategic, expert value to your project.

In this guide, you'll get our best recommendations for how to prepare for an initial development consultation, the questions you should ask a potential partner (and the answers you should be looking for), and a broad ballpark overview of the investments you should expect to make for a custom development project.

Let's get started!

CLARITY WORKSHEET:
11 THINGS TO THINK ABOUT BEFORE YOUR INITIAL CONSULTATION

It can be overwhelming walking into a software consultation as a tech newbie. But any development firm that's worth their salt will take the time to understand the entire problem first from a business standpoint, not a technical one. The discussion should be productive and helpful, not intimidating.

Still, going in with at least a few ideas of what you're looking for in a new application can only help put you ahead when it comes to choosing the right partner. Here are 11 topics to get you thinking about your preferences and needs so that you can feel prepared for your initial conversation:

BUSINESS PROBLEM

What business problem are you trying to solve?

How is that need currently being addressed today?

How will the new software application improve that?

What are the anticipated benefits from this improvement?

How would you quantify these benefits?

USER TYPES

Who are the different groups of users who will be logging into the application?

Are they customers? Employees? Vendors?

What different levels of access will they need to have?

USER TASKS

What are the different tasks that users will need to perform in the application?
(For example, an ERP system might have features that allow users to view available inventory, monitor customer orders, compare data across departments or retail locations, and forecast demand.)

DEVICES AND PLATFORMS

What will be the primary mode and method of access for the application?

Will the application be used mostly by information workers using desktop devices or field workers that are highly dependent upon mobile access?

Will devices running the application have persistent Internet connectivity?

Will different users have different needs?

PREFERRED TECHNOLOGIES

Does your tech team need the application to be built within a specific technology stack?

Are there certain development frameworks, languages or databases that match your organizational preferences and/or skill sets?

INFRASTRUCTURE

Where will the new software application live?

Does your organization have a preferred cloud infrastructure platform (e.g., Azure, AWS, Google, etc.)?

Does your organization prefer Infrastructure as a Service (IaaS), Platform as a Service (PaaS), or Software as a Service (SaaS) solutions?

Is there a specific and compelling reason to consider on-premises infrastructure?

INTEGRATIONS

Does your application need to work with other internal or off-the-shelf software you use regularly (such as payment processing, CRMs like Salesforce, email marketing platforms, data analytics, or other applications)?

If so, do these platforms have readily usable and well documented integration points (e.g., APIs, Web Services, etc.)?

SECURITY AND COMPLIANCE NEEDS

Do you have specific industry requirements and regulations such as HIPAA or PCI DSS that require heightened security protocols or proof of compliance?

Are there requirements for the physical location of your infrastructure?

MIGRATION

What data do you want to bring from your existing solution to its replacement? Examples might include customer data, transaction reports and financial data, product inventory, communication records, or audit logs.

LAUNCH REQUIREMENTS

What assets and processes will you need in place to go to market and launch your new application?

Is there a firm deadline for launch?

How will you market the new software or communicate about it to internal employees?

How will you onboard new users and encourage retention?

How will you offer them troubleshooting and support?

MAINTENANCE FOR CURRENT TEAM

What are your tech team's bandwidth and expectations for monitoring, maintaining, updating, managing, and supporting the new application?

9 QUESTIONS TO HELP YOU EVALUATE A POTENTIAL DEVELOPMENT PARTNER

mercuryworks

1. IS THIS COMPANY A GOOD MATCH TO YOUR TECH NEEDS, BUT NOT A ONE-TRICK PONY?

- [ ] Do they specialize and have deep experience working with the tech stack you need?
- [ ] Can they be flexible and offer solutions beyond just a singular technology or platform they're used to working with?

Why It Matters

If your tech team prefers to work with a certain tech stack, you'll want to find an application development partner that is well-versed in those technologies. But the right development partner should have the expertise to fit your needs and the flexibility that's required to offer creative problem solving.

Your partner should have enough diversification that they're well equipped to make strategic suggestions that will improve the final product, even if they're not currently present in your tech stack.

What to Look Out For

- Beware of potential partners who don't specialize–it's a good sign they're outsourcing your project to whoever they can find to do it and may not have the depth of knowledge they need to execute efficiently or deliver a high-quality product. Or, they may be a proverbial jack-of-all-trades, master of none.

- On the other hand, look out for firms that only offer one solution as a "one size fits all" approach to every problem. They may miss opportunities for optimizing performance and functionality by clinging to a single infrastructure or framework.

NOTES

2. DO THEY HAVE PROVEN EXPERT EXPERIENCE?

- [ ] Can they offer in-depth case studies, testimonials, and links to previous projects? Do case studies depict how well they were able to understand their client's challenges and specific needs?

- [ ] Are they willing to provide references you can speak to about the partner's responsiveness, adaptability, and skill, along with more details about what the working relationship was like?

Why It Matters

Any potential application development partner should provide no doubt that they bring a wealth of experience to your project. It should be clear that they have done the type of engagement you are looking to do many, many times.

While they likely haven't built the exact application you're looking to develop (after all, this is custom development), their work experience should reflect expert working knowledge of key components of success in your software.

What to Look Out For

- Avoid companies that only provide company logos on their website but not in-depth case studies that show an understanding of the problem and the solution they were able to offer.

- Beware when a potential partner points you to testimonials when you ask for references. They should be open and willing to share names and contact information for their happy clients so that you can investigate further on your own.

NOTES

3. DO THEY HAVE MULTIDISCIPLINARY EXPERTISE?

- [ ] Is the team comprised of generalists who know a little about a lot, or are there experts in specific areas across the organization?

- [ ] Are there dedicated front-end and back-end engineers? Solution architects? DevOps engineers? UX/UI designers?

Why It Matters

A team of specialists will possess the skill sets to develop creative solutions to your and your users' problems and be better equipped to work through potential challenges that may arise during the development process. Expect a large difference in quality when you transition from working with generalists to experts in their field.

What to Look Out For

- Visit the company's website or LinkedIn page. Look for employees with a diverse set of job titles, specializations, and age ranges. Thirty people with the title of "software engineer" and little to no prior experience should raise your level of suspicion.

NOTES

4. ARE THE COMPANY'S DEVELOPERS IN-HOUSE EMPLOYEES OR SUBCONTRACTORS?

- [ ] Do they employ and invest in training developers on staff, or do they subcontract with near-shore or offshore labor?

- [ ] Will the same employees building your application be available for future updates and support going forward?

Why It Matters

In order to provide consistent, reliable outcomes, your application development partner should employ and invest in training developers on staff. This provides more continuity for projects throughout the lifecycle. It also allows the firm to set and hold employees accountable to standards and best practices and invest in professional development. This enables their team to grow their skills over time and stay abreast of new trends, which benefits your development both now and in the future.

What to Look Out For

- Firms that hire subcontractors to execute on their projects to save costs and maintain flexibility in hiring. It's a sign that they're putting their business needs ahead of yours.

NOTES

5. WHAT IS THE COMPANY'S COMMUNICATION STYLE?

- [ ] How easy will it be to get ahold of them with questions, requests, or problems?
- [ ] How much visibility will you have into the status of your project as it's being developed?
- [ ] Is there a clear process for the company to keep us informed?

Why It Matters

An application development partner is a partner in the process, meaning you should expect collaboration and open communication at all times regarding work progress, questions, and changes in the delivery schedule. Too many clients have to find out the hard way, investing way too money into a project and getting burned in the process when it goes over time and over budget without a clear explanation. It becomes very hard to know who to trust.

What to Look Out For

- Testimonials that only focus on the end result and not the development process, or references that are noncommittal about the working relationship
- Firms that don't offer a clear process to keep clients apprised of their project's status, such as regular sprint meetings and demos in which deployed, functioning features can be observed by stakeholders at your company for feedback and input
- Inability to see exactly where things stand at all times via a portal that provides full visibility into the project's budget and work progress

NOTES

6. DOES THE COMPANY FOLLOW DEVOPS BEST PRACTICES?

- [ ] Will development be done across multiple environments with integrated automated testing (e.g., Development, Testing, Staging and Production)?

- [ ] Does the company use deployment pipelines for continuous delivery and integration? Will feature flags be used to manage which users see application updates and when?

- [ ] Does all coding happen in a distributed repository?

Why It Matters

DevOps is a system of practices that makes application development more efficient and improves product quality. From best practices for maintaining code repositories to managing complicated projects, DevOps has evolved in the past decade to an industry standard.

A development partner with a strong DevOps culture and proven experience tends to produce better, faster results up front, which ends up saving you time and money. In addition, an end-to-end deployment pipeline for release management allows for automated testing to catch code issues before they're integrated into the broader code base. Deployment pipelines also enable smoother ongoing support, reducing the amount of technical debt that your team might incur from a firm that releases a product manually.

What to Look Out For

- Lack of software version control system such as Git and related workflows for proactive development code validation and management
- Unclear protocols for responsible release management practices
- Introduction of quality assurance and testing only in the later stages of the build (they should be "baked in" as best practices from the beginning)

NOTES

7. IS THE COMPANY INVESTED IN THE PROBLEM YOU'RE TRYING TO SOLVE?

- [ ] Do they follow a rigorous assessment, strategy, design and development roadmap planning process to ensure the application needs and particular are well defined before they begin development work on the actual application?

- [ ] Do they take the time to understand not only the technical challenges you face, but also the business problem?

Why It Matters

Product vision is what separates a strategic partner from a simple order taker. A good application development team will begin by attempting to gain a deep understanding of your users and their needs, as well as yours. The assessment process should involve your partner gaining a deep understanding of your business and assessing your challenges before making a recommendation.

Being able to view your product from a business perspective instead of just a tech perspective is absolutely vital to creating an application that meets your needs. It also enables your application and your relationship with your partner to contribute increasing value after launch–so that every activity from hosting, managing, and maintaining the application to investing in ongoing product development is accomplished with your product vision at the forefront.

What to Look Out For

- A company that wants to start building ASAP and doesn't ask nearly enough questions to make you feel comfortable that they understand you or your needs

- A work agreement that lumps assessment, strategy, and development planning in as part of the development engagement, since attempting to scope out a software development engagement without fully understanding the vision and details for accomplishing it lacks intellectual honesty

NOTES

8. IS THE COMPANY COMMITTED TO KNOWLEDGE TRANSFER?

- [ ] Are they willing to share knowledge openly after the build is complete?
- [ ] Do they have an onboarding process to bring your team up to speed and support them over the long term?
- [ ] Who will own the software code and related intellectual property at the conclusion of the engagement?

Why It Matters

It makes no sense to pay for a firm to develop an application only to have them "hold the keys" when it comes to knowing how it's built and how to maintain it. Even worse is when you pay them to develop a custom solution that you don't own outright. A good partner is more than a good developer–they're a teacher and a guide who is committed to your success. They should work to empower your team and share how the application works inside and out. They should be willing to codevelop with your team, if desired. After release, your partner should be equipped to assist with onboarding and support for as long as you'd like and have the requisite organizational infrastructure for doing so professionally.

What to Look Out For

- Companies without a clear plan or process for onboarding or investment in a long-term relationship
- Companies that insist that they maintain proprietary control over parts of the application

NOTES

9. DOES IT FEEL RIGHT?

- [ ] Is the firm professional and timely in their communications?
- [ ] Can they explain difficult concepts clearly?

Why It Matters

While there may be many firms out there that can handle your technical challenges, that doesn't mean that they're all a good fit for you and your organization. Pay attention to how the firm is engaging with you and your team. When you outreach references, ask them how the firm actually performed as a partner. What stood out about the relationship? What were the challenges? Having the right fit for your organization's style and preferences will go a very long way towards a successful long-term partnership.

What to Look Out For

- Inability to articulate how their processes work
- Tepid references
- A bad feeling you can't put your finger on

NOTES

Application Development Partner Evaluation Checklist

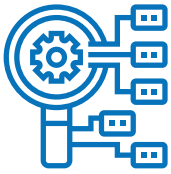
- [ ] 1. Is this company a good match to your tech needs, but not a one-trick pony?
- [ ] 2. Do they have proven expert experience?
- [ ] 3. Do they have multidisciplinary expertise?
- [ ] 4. Are the company's developers in-house employees or subcontractors?
- [ ] 5. What is the company's communication style?
- [ ] 6. Does the company follow DevOps best practices?
- [ ] 7. Is the company invested in the problem you're trying to solve?
- [ ] 8. Is the company committed to knowledge transfer?
- [ ] 9. Does it feel right?

APPLICATION DEVELOPMENT PRICING: WHAT TO EXPECT

Q: How much does it cost to build a custom enterprise web application?
A: It depends.

Custom software is typically reserved for businesses with specialized needs that off-the-shelf solutions just can't meet. The exact cost of a software application can vary widely, depend on several different factors:

Application size. Does the new software require a significant number of different pages or screens as part of its design? How many users does the application need to support? How much data and information does it needs to manage? What type of administration capabilities will be needed?



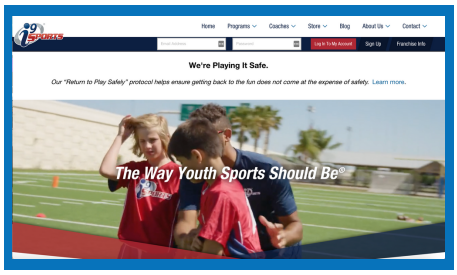
Application complexity. If the application carries out a lot of complex functions that require extensive business rules, calculations and logic under various scenarios, it will likely be more expensive and complicated to build than an application that does not. Similarly, if the application will have numerous types of users with varying needs, the complexity and cost tend to increase.

Application features and functions. Will the software require sophisticated design elements? How many specific features will need to be planned and built from scratch, and how many are iterations on what already exists in the market? Are you in a field that requires extra layers of security and compliance?

Application data and integrations. What is the anticipated scale and scope of application data needs? How many different systems will the application need to integrate with? Are there well-established APIs and/or web services to facilitate data integration? What type of data migration and/or cleanup may be required when building the new application?

A good rule of thumb is that custom software might be the right choice for you if your software development budget begins around $50,000. There is a wide range for custom software costs, ranging from $50,000 up to more than $250,000 depending on the factors above. But if your budget is significantly less than this range, we recommend starting with an off-the-shelf solution or potentially modernizing and updating the software you already have.

SOFTWARE DEVELOPMENT IN ACTION WITH I9 SPORTS



The Problem

i9 Sports relies heavily upon its web presence to market to and connect with customers. The existing web presence had been developed about 5 years ago and was not using the latest technologies and current web standards, which lead to a sub-par customer experience.

The Goals

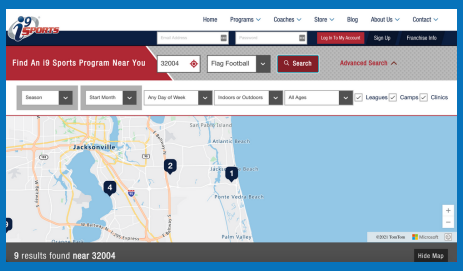
i9 Sports came to MercuryWorks looking to redevelop their online presence to improve overall site performance, increase mobile usability, and improve SEO flexibility. This included the need to redevelop the public facing components of their website and also extensive backend administrative functionality. Additionally, they wanted several new components that would better serve their various stakeholders: parents, coaches, program coordinators, franchise owners, and i9 corporate support employees.

The primary goals and objectives of the new site:

- Sell new registrations and related ancillary merchandise/products
- Cross-sell/upsell registrants on new signups, primarily via email campaign prompting
- Provide needed information to all constituents (e.g., parents, volunteer coaches, program coordinators) for a positive customer experience
- Improved content management system that allows for more efficient management

The Solution

A fully responsive site/app and headless WordPress implementation, complex registration process, eCommerce functionality and back-office integration. Extensive and high-fidelity public marketing pages and company blog along with an extensive password-protected member, coach and franchisee portal.



"MercuryWorks was instrumental in establishing a strategy for our new presence and user-facing system, including the use of a headless CMS and PWA. Their team was very effective in working with i9 Sports' IT staff to integrate with our services and internal systems. I highly recommend them!"
– Michael Warren, Director of IT, i9 Sports

mercuryworks

ABOUT MERCURYWORKS

MercuryWorks is a software development firm based in Tampa, Florida, and serving enterprise customers throughout the United States. We have solved wicked problems for hundreds of clients and has developed many long-standing relationships based on trust, customer service, and quality.

We specialize in the mission-critical software that enterprise businesses depend on to drive revenue and team productivity. With more than 20 years of experience in software development, we consistently ship custom solutions that closely align with business needs and continue to work with clients for their long-term, ongoing, evolving support and development.

Interested in learning more about what we do and seeing if your project is the right fit?

HAVE MORE QUESTIONS?

CALL US:
813.551.3144

EMAIL US:
INFO@MERCURYWORKS.COM