



# THE ULTIMATE FORMULA FOR **SPEEDING UP** **MOBILE** **DEVELOPMENT**


*Six ingredients that will make  
your app hit the market  
in a flash*



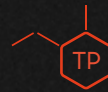
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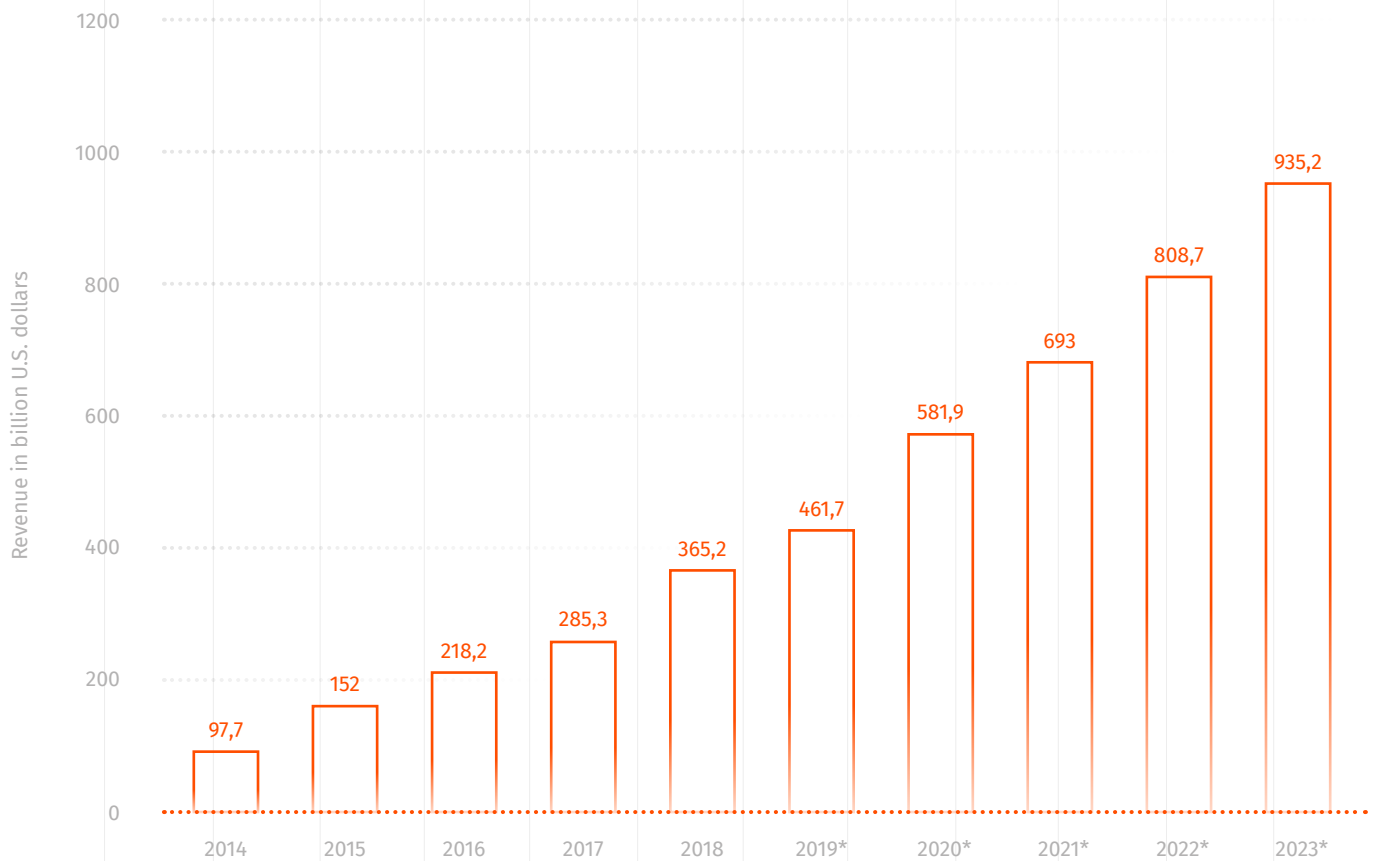
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# FOREWORD

As we're writing this introduction in December 2019, there are over **4,5 billion active internet users** out there. On average, each of them browses the net for **6 hours 42 minutes** which equals more than 100 online days each year.

Together with the ever-growing desire for keeping the massive amount of online information at our fingertips, the above-mentioned statistics provide a logical explanation for the question why mobile applications are all the rage these days. As of **2019**, the worldwide mobile app revenues amounted to 461 billion US dollars and **by 2023**, **paid downloads and in-app adverts are believed to generate over 935 billion dollars in revenue.**



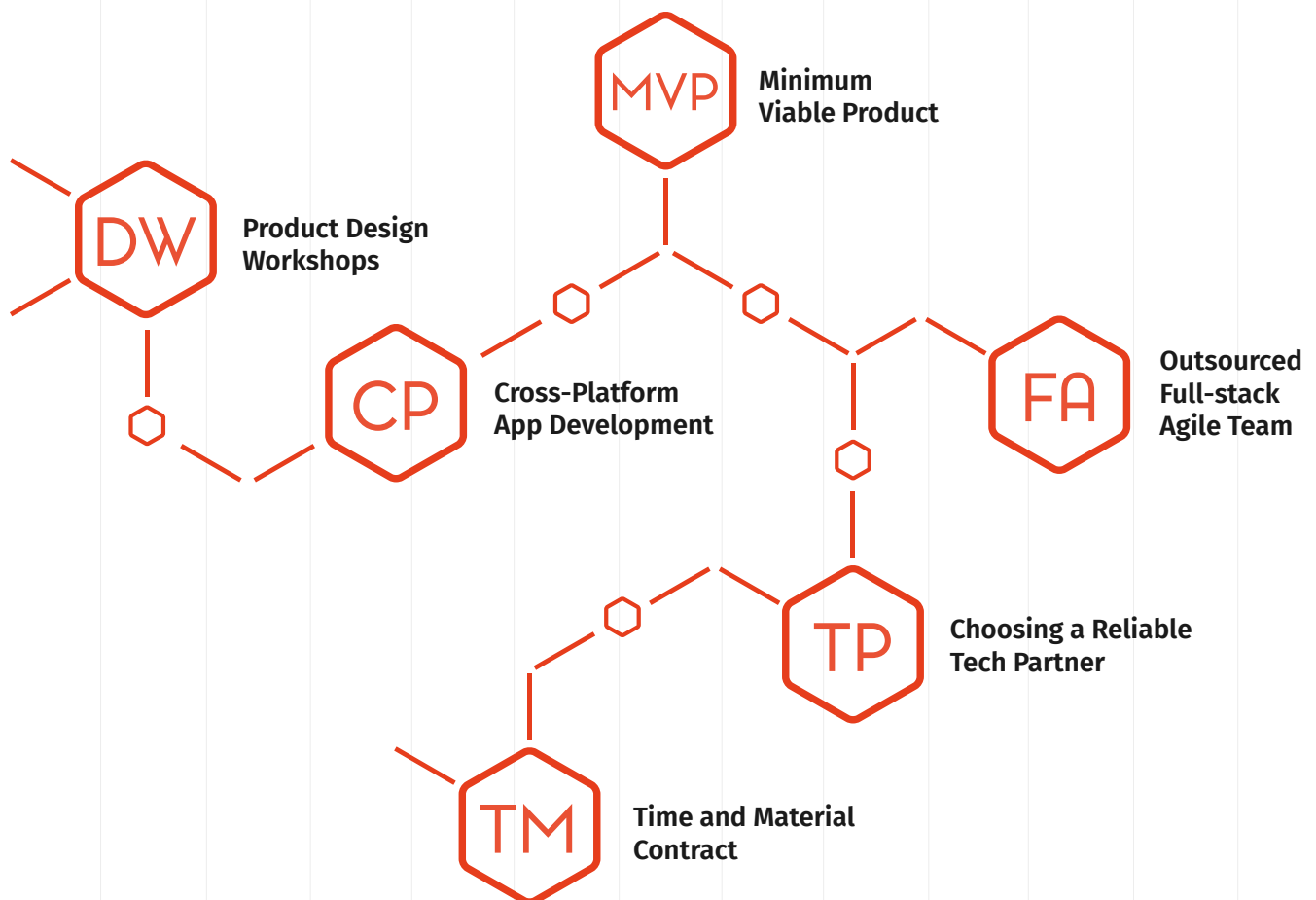
Source: Statista

## THE ULTIMATE FORMULA FOR SPEEDING UP MOBILE DEVELOPMENT

If you're about to enter the digital industry, these figures alone should make you consider building your product in the form of a mobile app. However, creating an application can be challenging as you may either lack the time or financial resources to launch it quickly and seize the opportunity as soon as possible. If that's the fear of yours, you've come to the right place.

Having been cooperating with startups for over two decades, we've got to understand all the pains and needs of the newly-minted entrepreneurs and, in an attempt to respond to them, worked out an ultimate formula for speeding up mobile development.

Today, we're sharing this knowledge by introducing you to the **six ingredients** that – when mixed in the right proportions – will result in major time, money, and effort savings without the risk of compromising on quality.



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# PRODUCT DESIGN WORKSHOPS

*because a validated idea is better  
than unwanted product*

# PRODUCT DESIGN WORKSHOPS

As you were reading the title of this article, 10 new startups were created. 137,000 businesses are born every day as indicated in this [research](#). What happens to all these ventures, you might wonder? Unfortunately, 90 percent of them fail. According to the [CB Insights report](#), the no. 1 reason why the majority of startups shut down is the lack of market need.

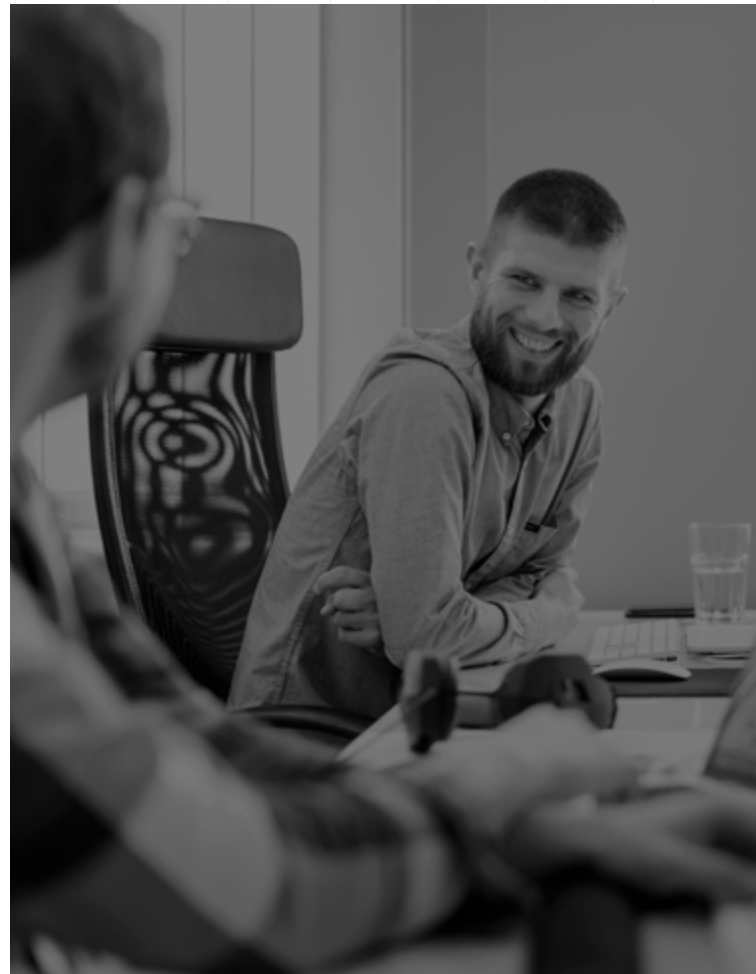
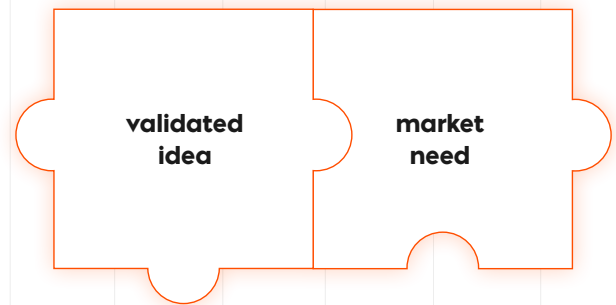
What do beginning entrepreneurs say about their failures? Treehouse Logic, one of the startups described in the above-mentioned analysis, is straight-forward about its biggest mistake:

*“Startups fail when they are not solving a market problem. We had great technology, great data on shopping behavior, great reputation as a thought leader, great expertise, great advisors, etc, but what we didn’t have was technology or business model that solved a pain point in a scalable way.”*

*It occurs that a validated idea is the key to a startup’s success. But how do you make sure your vision will turn into a profitable business? That’s what product design workshops are for.*

Workshops are the best way to start the [app development process](#) as they significantly increase the chance of building a **product that not only reaches its intended business objective but is also**

**going to be loved by its users.** How do they help achieve this goal? With a prototype of your final solution.



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**A prototype is the main deliverable of a product design process.** When done right, it reveals all the strengths and weaknesses of your concept and allows to perfect your app before implementing it on a large scale. In other words, it works as a reality check for a given idea.

Building a prototype helps you get a sneak-peek at how real people will interact with your product.

It allows the product design team to gather user feedback necessary to make further improvements.

*With the prototype at hand, you can quickly build an MVP and quickly hit the market with a top-notch product.*

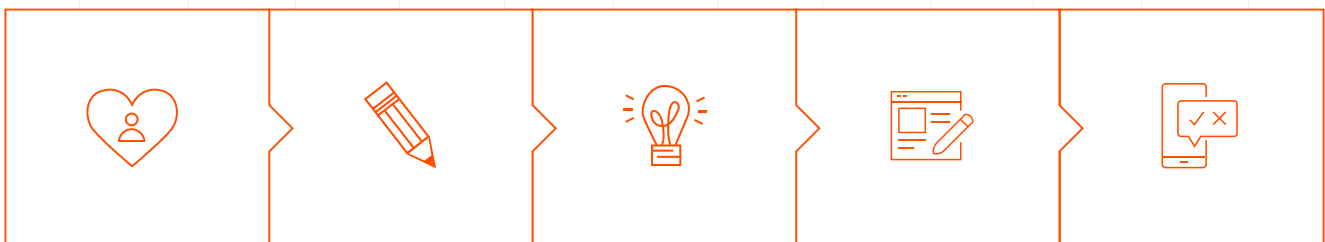
**empathize**

**define**

**ideate**

**prototype**

**test**



**Prototyping is also useful in attracting investors.**

To raise capital for your startup, you need to convince a business angel that your concept is a promising opportunity worth funding.

**Winning the hearts of investors is much easier with a thought-out and well-developed prototype at hand than a vague idea in your mind.** That's how you prove that your initial assumptions have been revised, that you've discovered all the uncertainties, risks, and weak points, and - ultimately - you have a better

understanding of your project. All of that gets you one step closer to receiving funding.

Last but not least, product design workshops provide you with the estimation of the development costs yet to come. What's crucial - an accurate estimation that's not plucked out of thin air. **Also, by prototyping in the first place, you reduce the risk of time and money consuming changes emerging later on in the process.**

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# CROSS-PLATFORM APP DEVELOPMENT

*because working smart is better  
than working hard*

# CROSS-PLATFORM APP DEVELOPMENT

A decade ago, entrepreneurs had to decide which mobile operating systems their product was to cover: Android, iOS, Microsoft, RIM, or Symbian. Today, startup founders are facing a different dilemma. With Android and iOS accounting for **98% of the total mobile OS market share**, it's obvious that these two shouldn't be overlooked. **The question remains, which approach to building an app available on both platforms to adopt.**

The first option is native development that assumes building two apps, each of which leverages the programming language native to a given platform. While offering high performance and flawless user experience, it turns out to be unaffordable to many startups. Fortunately, there's a more time-efficient and cost-effective alternative: cross-platform development.

*The cross-platform approach allows covering two operating systems with one code. In this case, you have a wide range of frameworks at your disposal, with the most popular ones being **React Native and Flutter.***



What exactly makes cross-platform apps a go-to solution for **entrepreneurs facing time and budget constraints**? First and foremost, they don't call for hiring separate Android and iOS-oriented teams which results in **improved team management and lowered outsourcing costs.**

Secondly, with only **one codebase** (with some minor platform-specific additions) needed for your app to work on both platforms, the developers can **reduce not only the sketch-to-launch but also bug-fixing and upgrading time.** This, in turn, translates into the possibility of saving a large proportion of the initial project budget, which you can later devote to perfecting your app according to the user feedback.

Thirdly, cross-platform apps are **adjusted to frequent updates.** Frameworks like React Native and Flutter offer hot reloading: a feature that enables software engineers to implement changes in code while the app is running. In other words, they allow for bug fixes or UI improvements without recompiling the app.

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Speaking of faster mobile development, we should mention PWAs as well. Being basically web apps that imitate mobile apps, they're **faster and cheaper to develop and maintain than native apps**. It all boils down to operating on a single codebase that can be built by a smaller developer team and regular updates taking place in the background regardless of the user's OS.

*However, if you're looking for a near-native look and feel, cross-platform should be your no. 1 candidate for speeding up mobile development.*

### 3 approaches to mobile development: comparison

	Native	Cross-platform	PWA
tools	Java Kotlin Objective-C Swift for iOS	React Native Flutter Xamarin	HTML CSS JavaScript
pros	fully native UX high performance customizable UI access to native APIs	wide market reach faster and cheaper deployment reduced workload code reuse	faster and cheaper deployment online visibility no installation or updates required low data consumption
cons	expensive development and maintenance time-consuming deployment no code reuse	possibly slower performance UI/UX discrepancies	app store traffic loss limited functionality
examples	Twitter Waze Pokemon Go	Facebook Skype UberEats	Spotify AliExpress Forbes

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# MINIMUM VIABLE PRODUCT

*because done  
is better than perfect*

# MINIMUM VIABLE PRODUCT

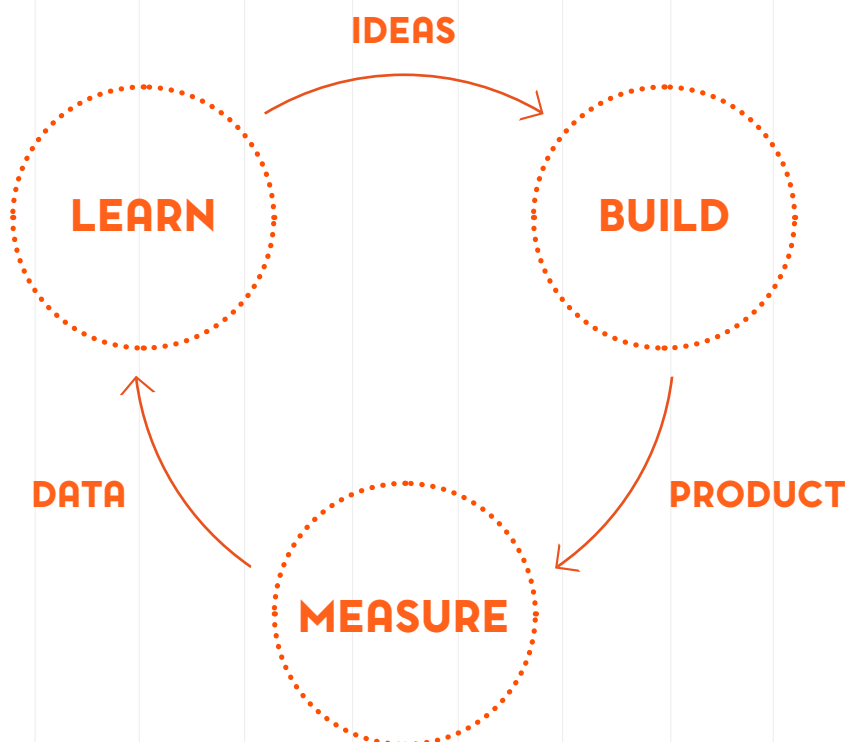
You might have heard that ideas are like babies. Come to think of it, this metaphor is pretty accurate, especially from a startup perspective. Many young entrepreneurs develop an emotional connection with their vision, become defensive of it, and feel the need to perfect it before it sees the light of day. But just like with children, at some point, you just need to let go of your idea. And that's when MVP steps in.

Minimum Viable Product, as the very name suggests, is the preliminary version of your product showing nothing more but its **core functionalities**. Allowing to validate the business idea and engage with actual users early on, it often becomes an invaluable part of the software development process carried out by startups.

MVP is considered a time-efficient solution for a couple of reasons, the first one being the **focus on**

**the essential features** only. As a visionary, you may be tempted to keep enriching your concept with new fantastic features which, at the end of the day, make it unbearable for any user – not to mention how much it prolongs the development process. Adopting the MVP approach, on the other hand, **forces you to prioritize the product requirements without getting fixated on creating a pixel-perfect digital gem**. Even more importantly, it puts your team's **full attention to building one or two core functionalities**, which contributes to faster release.

*Just think about Uber. Its **beta version** simply connected drivers with iPhone owners and enabled credit card payments – and yet, it clicked.*



Secondly, developing the first iteration of your MVP faster translates into the ability to quickly enter the market. And that's when you receive the most valuable investment a startupper can dream of: user feedback. Seeing how the target audience interacts with your product serves as a **reality check** that shows if your vision makes sense as well as helps you determine which features are redundant and which ones you should add next. Knowing that you can **avoid taking unnecessary software development steps** which would be time-consuming and ineffective.

*Speaking of users, if your business idea is truly revolutionary, an early-released MVP can help you secure a strong position on the market.*

It's not uncommon for a couple of people to have a similar business idea at once – the key to success is to be the first one to put it into practice. And that's

exactly what you can achieve with an MVP. While this particular benefit may not pertain to mobile app development per se, it surely helps you succeed sooner than later.

Finally, a Minimum Viable Product **increases your chances of being noticed by an angel investor**. Even if the initial cash injection is not that impressive, it will certainly play a major role in accelerating the development of the full-fledged product.

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# OUTSOURCED FULL-STACK AGILE TEAM

*because agile teams  
produce fast tangible results*

# OUTSOURCED FULL-STACK AGILE TEAM

One thing is for sure: whether you're a startup or an established company, you won't build a top-quality product without support from experienced IT professionals. The question remains, however, is it better to hire an in-house team or outsource?

Building your own team from scratch may sound like a great idea as it fosters a sense of trust and belonging. At the same time, hiring in-house is not only an expensive but also a lengthy process.

*According to various statistics, it takes approximately **41 days** and **45 to 95 thousand U.S. dollars** to hire a developer – and these factors alone can significantly delay your digital success.*

Outsourcing, on the other hand, can be a much more **cost-effective and time-efficient solution**. The key is to find a tech partner who's ready to assume full responsibility for the project. What does it mean in practice? **A full-stack agile team managed by an experienced PM.**

To unleash its potential, your mobile project needs to be based on a range of programming languages, frameworks, and libraries that meet your business objectives best. The same applies to design and quality assurance. **Your ideal tech partner should show not only a remarkable understanding of specific technologies but also the ability to combine**

**them in a creative way** at every stage of your app's development process.

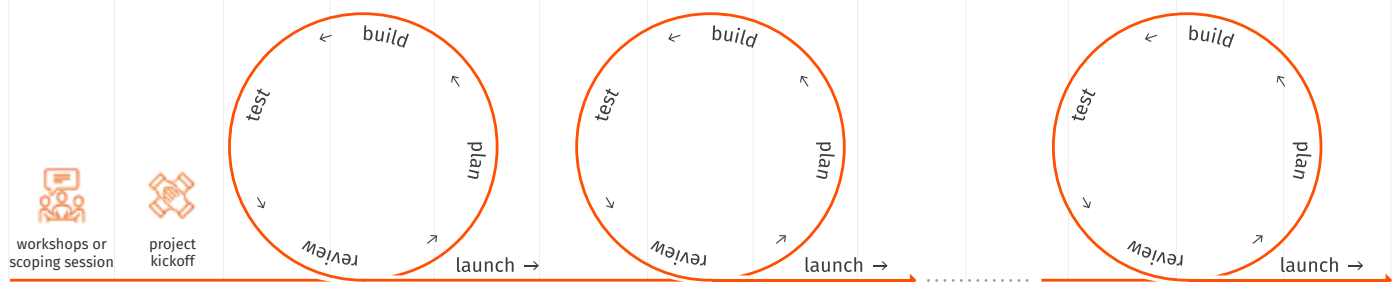
*At the end of the day, the full-stack approach will give you a holistic view of your project and help to come up with the best tech solutions in no time.*



To ensure your mobile development process is carried out as efficiently as possible, you should also look for an agile tech partner. Agile methodology assumes short release cycles, frequent deliveries, as well as an MVP approach to software development.

Collecting real-time user feedback allows agile teams to **improve your app on the go at the early stage of development and not waste time on ineffectual features** – both of which translate into quicker entry into the market of your choice.

## agile development process



Ultimately, the experience of cooperating with an **outsourced team** depends on the vendor's **Project Managers who act as a link between the client (that's you and your colleagues) and the tech partner**. How will you know that a PM can run the development process efficiently? Ask them about courses, certificates, and how they adjust methods like Scrum or Kanban to the project's requirements and life cycle. You can also inquire about procedures in managing risks, budget, scope, and backlog as well

as how they keep the team motivated and handle communication with the client.

*Bottom line is to ensure you're dealing with skilled professionals capable of streamlining the mobile development process without compromising on quality.*

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# CHOOSING A RELIABLE TECH PARTNER

*because sometimes you need  
a helping hand*

# CHOOSING A RELIABLE TECH PARTNER

When you put the development of your startup project in the hands of an external company, you need to make sure it can deliver top-notch tech solutions and that it's really worth your trust.

How to verify it?

We probably won't surprise you, but first, you need to check the vendors' experience. Pay special attention to the projects **from the same industry and location** as yours. This way you can verify not only the knowledge of your business field but also the awareness of specific regional legal limitations.

*Also, with experience gained in a particular industry come battle-tested processes for*

*speeding up the development and boosting the effectiveness of work.*

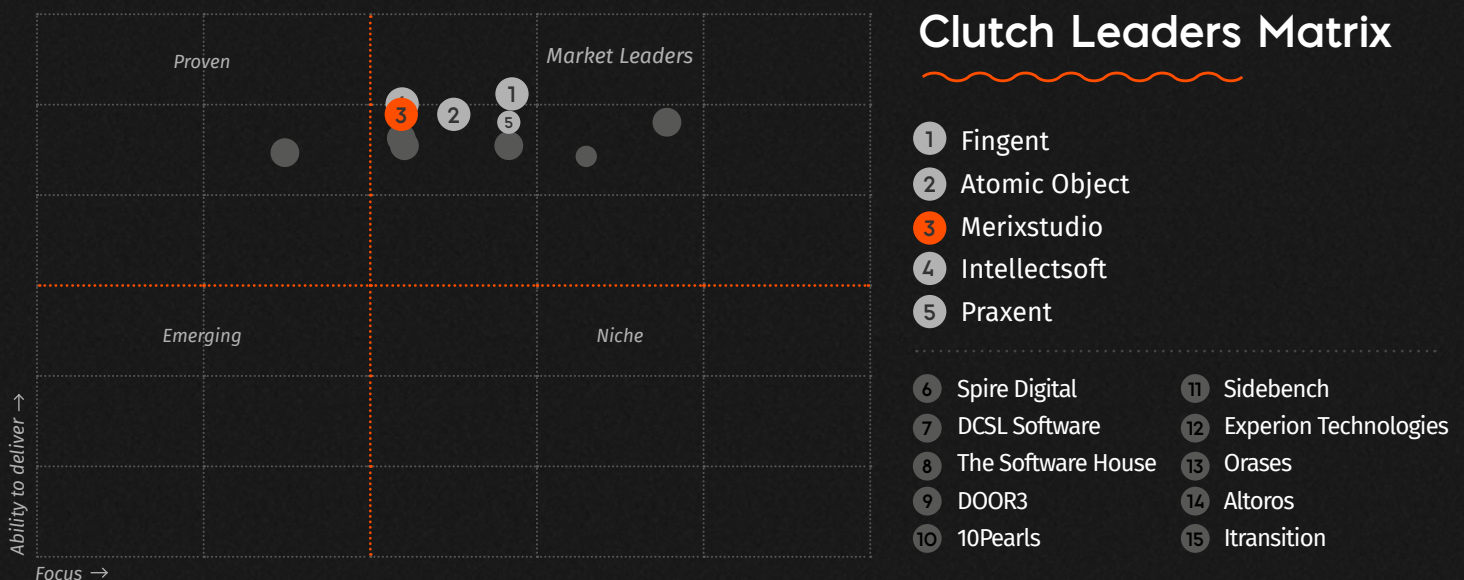
Secondly, find out more about your potential partner's technology expertise. Focus especially on the experience within **solutions that will support fast development**. They should be easy to handle, scalable, simple but mature, and even better if there include ready-made libraries and components which additionally hasten coding. Among the solutions enabling brisk app development and dynamic scaling up are frameworks like React Native, Flutter (introduced earlier in this ebook), and **Python - leading programming language for startups**.



## THE ULTIMATE FORMULA FOR SPEEDING UP MOBILE DEVELOPMENT

Another vital issue you should consider while looking for a **reliable IT partner** is **business maturity**. The size of the company and its presence on the market can give you insight into the possibility of flexible scaling up the team when it's needed but to gain a broader view you should dig deeper.

Take a closer look at its **specific processes** in software development, **product design**, team and project management. The performance of solid vendors should be based on meticulously developed processes sprung from Agile. Investigate their solutions for maintaining **high standards of communication and transparency** - remote cooperation needs to be rooted in them!



Leaders Matrix from Clutch showing the highest rated companies in Custom Software Development (18.12.2019)

Last but not least, **check the testimonials** – the ones on their website and those published on trustworthy B2B Ratings & Reviews pages like **Clutch** or **The Manifest** which aggregate the opinions of clients gathered during in-depth interviews and show the aspects essential to choose a proper partner in software development. You'll find there the leaders in offered services as well as in more specific industries.

In conclusion, remember that even the most meticulously conducted research should be finished with a **talk – or even a few talks** – with selected companies. Meet the people you consider working with, organize a tech-call with team leaders and developers to check their skills and language. If you still hesitate between 2-3 potential partners nothing will substitute **coming to the office personally**. After all, for some time these will be your people as well!

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# TIME AND MATERIAL CONTRACT

*because fixed  
is the opposite of flexible*

# TIME AND MATERIAL CONTRACT

Traditionally, in business cooperation a company defines the budget within which a vendor can operate to deliver prearranged solutions at a specific time. **This is the fixed-price approach, which gives you an idea of the final cost of the project, its scope, and duration...** or not. Why? In most software projects, especially the custom ones, it's just impossible to fairly estimate these three things. The vendors usually assume some safety net, so **the quotes in fixed-price contracts are just higher.**

*But the real problem with the fixed-price model, especially when you need to speed up mobile development, is the*

*necessity to prepare a strictly set specification and then stick to it.*

If you build your app from scratch, you will waste a lot of time creating a highly advanced scope with all the required features and clearly defined tech solutions. Not to mention that after setting these plans, you'll need to rigidly stick to them during the development process. To be honest – it's hardly doable. Some of the ascertained requirements might need to be reformulated because the market environment changed, or the first users verified your ideas. Remember that **every change in the development process costs not only money but also precious time.**



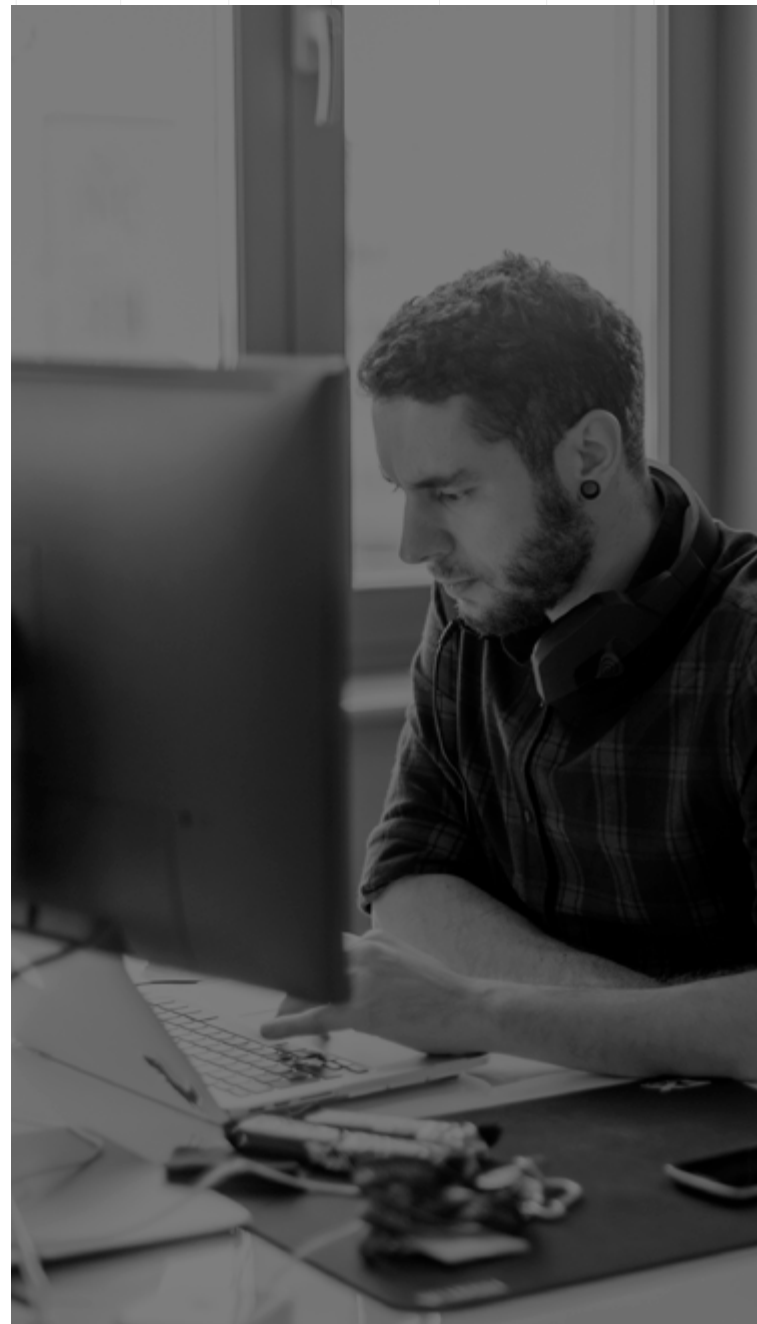
The previously-mentioned issues have contributed to increasing the popularity of a different approach to charging for developing apps: **time and material**. This model assumes you'll pay for the delivered work and won't have to plan every detail in advance. In the beginning, you and the remote team set up a general goal, basic features, and the tasks for the coming, near feature (usually week or two, depending on the Agile sprint length).

*T&M contracts are much more flexible and give an ability to implement changes during development.*

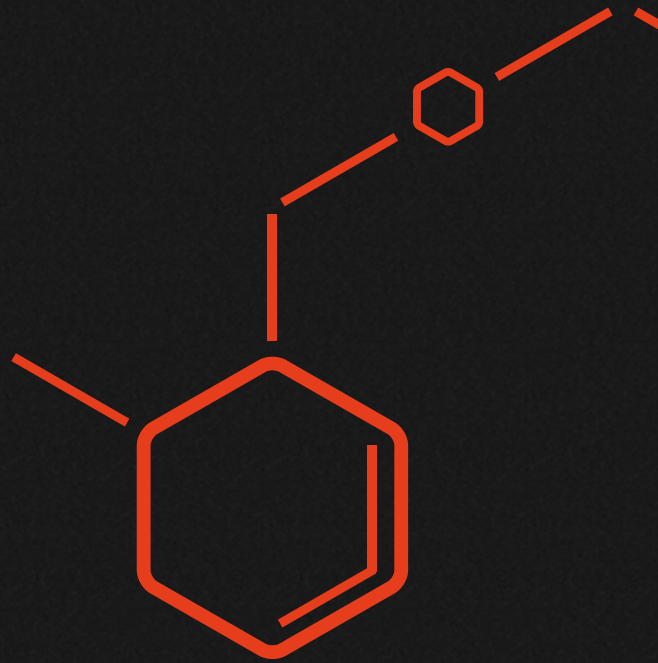
We're aware, though, that cost must be somehow estimated (budgets, budgets, budgets), so it's always helpful to conduct a **product design workshop** and specify business requirements. With workshops, tech-planning, and project analysis, your IT outsourcing partner is able to estimate the number of sprints (cycles) required to deliver the outcome by a particular team and pre-calculate the cost. Nevertheless, **bear in mind that nobody can promise the estimates will match the final budget**. There's no way to predict all modifications or the elements that would need further discussions.

Finally, the **T&M billing model requires trust and transparent cooperation with a remote team** so a diligent analysis of potential contractors is crucial. A product of the highest quality that will fully meet your expectations can only be created by a vendor


you trust and the team than with a proven track record. If you want to know how to find a reliable software development partner check the previous chapter or an extensive **[guide on our blog](#)**.





# Curious how we can help **build** **and launch your** **mobile app** **faster?**



*Don't think twice and contact us!*

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