

A photograph of two people sitting on a teal couch. The person on the left is wearing a blue and white striped shirt and is holding a white tablet. The person on the right is wearing a light blue denim shirt over a white patterned top. A semi-transparent grey box with white text is overlaid on the right side of the image.

The Ultimate Guide to Crowdsourced Testing



**Global
App Testing**

www.globalapptesting.com



Contents

The Ultimate Guide to Crowdsourced Testing	3
Overview of crowdsourced testing	4
Why use crowdsourced testing at all?	6
Using crowdsourced testing to scale QA	7
Localisation efforts	10
Who is in the crowd?	11
Moderating the results	12
Where to use crowdsourced testing	14
How to implement crowdsourced testing	18
Conclusion	21
Contact Us	23
BONUS Section	24





The Ultimate Guide to Crowdsourced Testing



Thank you for downloading **The Ultimate Guide to Crowdsourced Testing**.

Before we begin, what qualifies Global App Testing to even write such an e-book as this?

We're glad you asked:

- We've tested over 6,894 apps and websites over the last 3 years
- We've tested for the biggest organisations in the world including Facebook, Spotify, Virgin Media, Microsoft, BP, TripAdvisor, the UK Government, Evernote, King and Betfair
- We have customers in over 26 countries
- We have 20,000+ professional testers in over 105 countries
- We run Testathon® events around the world where we work with the top testers
- We've tested apps and web apps on Android, iOS, Linux, Windows, Mac, Blackberry, Raspberry Pi, planes, trains and automobiles (OK, maybe we haven't tested trains and planes, but we did get asked once)



Overview of crowdsourced testing

At this point it should be obvious that we've got this whole testing thing down and we've built up a top-quality crowd. So, now you know who we are and what we've done, let's dive into the topic at hand!

Here at Global App Testing we like to say there are two types of QA people in the world: those who have tried automation of QA and those who believe it will solve all their problems (but haven't yet implemented it).

We're prefacing this introduction not to say that automated testing shouldn't be part of your testing strategy.

In fact, far from it. What we're trying to say is that automation plays a part, as does in-house QA, but so does crowdsourced testing.





Overview of crowdsourced testing

There is overlap between all three of the disciplines of testing and no one set way of testing can completely cover all the necessary angles for releasing a quality product to market.

We started off speaking about automation because we often talk to people who tell us that they are automating all their testing. The problem with picking a single approach to testing is that it cannot match the expectations or needs of the organisation.

One recent example came from a travel company who had been moving their testing to automation for the last 18 months. When we began working with them they acknowledged that they had only managed approximately 10% of test coverage via automation.

Likewise, their in-house QA team simply did not have enough manpower to cover the gaps in coverage and they needed to use a solution that was scalable.

When you blend all three approaches to testing, you get a complete QA strategy that stimulates growth in your organisation.





Why use crowdsourced testing? Isn't it just outsourcing?



No.

Outsourcing your QA is merely shifting the responsibility away from your in-house team to another firm. This doesn't solve the actual problems you need to have solved. Crowdsourced testing exists so that you can scale the testing needs of your organisation in a flexible way.

Think about it like this: if you have needs requiring exploratory testing and it takes 3 people to complete the work on a 2-week release cycle, how does outsourcing help you scale that? It doesn't—if you want to do it quicker you need more full-time people and it doesn't matter if you do that in-house or via outsourcing. Simply throwing more people at the problem is a linear approach to a problem that needs an exponential growth solution.

Contrast this to crowdsourced testing in which testers are available on-demand, when and where they are needed, with the volume under your control. The benefits become obvious and deliver exponentially. Outsourcing also inherits the same problems as internal QA teams including biased feedback, internal roadblocks and resource limitations. Crowdsourced testers deliver flexibility and growth to your project as needed – let's explore how in greater detail.



Using crowdsourced testing to scale QA

Many great teams we've worked with over the years were apprehensive about beginning to use crowdsourced testing because they saw it as something unknown, untested (no pun intended) and largely unproven.

In fact, many companies who use Global App Testing initially come to us in a panic-stricken state because they have an immediate need that their QA team cannot solve.

Rarely do companies come to us because they believe in the virtues of crowdsourced testing. Most have never even heard of or seen the concept.

However, what changes after a few months is the mindset and understanding from them. Apprehension disappears and is replaced by enthusiasm and a real sense of creativity that can be applied to what they test and where.





Using crowdsourced testing to scale QA

Let's look at a company that uses Global App Testing to ensure that their app keeps employees safe around the world. This company provides their customers with employee tracking and security functionality in remote parts of the world. They **must** ensure that the app will still work if, for instance, an employee is dispatched to Chile.

How can you test that in advance? **With automation testing you cannot.**

If you use your in-house QA team you are going to need to fly one of your testers out there with the target device. The same thing applies for outsourced testing unless you are lucky enough to have engaged with an outsourced firm there to begin with.

Global App Testing was able to leverage the power of the crowd, locate multiple testers in the region and have them deployed within a few hours. Before the employee was even dispatched, the company knew definitively that they would be able to ensure his or her safety.





Using crowdsourced testing to scale QA

There are other scalability benefits to be had with the crowd too. The crowd doesn't call in sick, doesn't need to have a pension plan and certainly isn't intrinsically connected to the success of the app or website you are building. They also aren't blinded to an app's flaws by testing the same things repeatedly. Crowdsourcing also lends itself to scaling up and down based on needs. If one time you need more resources to test because you've got a bigger release on your hands, then you can simply get more resources in.

Have you measured, in human hours, the time it takes to QA your application or website before a launch? We've seen estimates that range all over the board depending on the size of the organisation we're working with, so giving a range isn't particularly helpful. However, we do encourage you to work that number out for your organisation because it will help to build a model of the impact crowd testers can have on the speed of delivery.

Typically, crowd testers are able to deliver results on exploratory testing in under 48 hours and much faster for test case execution.

Delivering quality at speed is highly critical in today's modern business world and the crowd enables you to do that.





Crowdsourced testers provide unique insight into the local markets you are testing in. As we highlighted above with the testers in Chile, the ability to get hyperlocal could be imperative to the success of your application in that market.

Did you know that for many years Myanmar was not really connected to the larger internet and so they developed their own language encoding, Zawgyi, instead of using Unicode? Even to this day, devices in Myanmar use either Zawgyi or Unicode depending on where the device is manufactured.

This poses an interesting conundrum for the company hoping to gain growth from the country. How can you test properly there?

The answer is the crowd—although surely by now you could have guessed that! Crowd testers can get their hands on the devices and let you know how the app or website renders, what UI issues exist and what bugs need to be resolved down to the OS and patch level. Try doing that with a device lab.



Who is in the crowd?

Can I build my own group of crowd-sourced testers?

You could. But we'd recommend against it. Developing relationships with professional testers in regions around the world is a time-consuming process.

Remember how we said we conduct Testathon® events around the world?

This is the way we get the absolute best testers from any given country at any given time. One of the benefits of using Global App Testing as your crowdsourced testing provider is that we are committed to recruiting the top testers in the world.

We find the best of the best and pit them against each other to claim the crown for their country and will be hosting the World Series of Testing in the near future.

When you decide to work with a crowdsourced testing company, make sure you learn who they have in their crowd, what they do to engage with them and how they encourage growth in the testing community.





Moderating the results

Now, if you've decided to use crowdsourced testers you need to make sure that the results you receive are moderated appropriately. This is imperative, because if you don't, you can end up with a bunch of results that are largely ineffective.

You can also end up overloading your developers with duplicate bugs and steps that might not be reproducible. Because you can be working with testers who speak another language, you may also encounter language barriers, so using moderators to work through these issues is a key factor.

There are three ways to moderate your results:

1. Moderate them in-house
2. Have the crowdsourced testers moderate themselves using "super testers" or testing "leads"
3. Have the crowdsourced testing company moderate them





Moderating the results

We're going to recommend that you don't use option one. Option one tends to slow down your scaling efforts and you end up needing to provide extra resources, which somewhat defeats the purpose.

Option two is interesting because many crowdsourced testing firms use it to varying degrees of success. Super testers or testing leads within the crowd can certainly cut down on issues with duplicate bugs and such but they still lack context around the end goals of the organisation. This can mean that bugs which aren't relevant still make it into your bug tracking system, causing additional work.

The final option is what we suggest organisations look for when selecting a crowdsourced testing vendor.

When you have a team of professional testing managers and testers who understand the end goals of the organisation and product, you get highly contextual and relevant bugs that make a huge impact to the release.

Testing managers who work for the crowdsourced testing company are engaged in the process, and have worked, often directly, with the QA team or engineers and thus can triage the bugs from the testers to make sure you focus on those bugs that truly make a difference.





Where to use crowdsourced testing

Crowdsourced testing is not a panacea or silver bullet designed to fix all your woes, but it does have some specific areas where it shines the best.

Exploratory testing

- Testers explore the application to make sure the app is functioning as expected. They utilise their own experience and background in testing to find reproducible crashes and real-world bugs.
- Exploring the application or website is a crucial step in understanding exactly how it may be used in real life and not under laboratory conditions.
- The crowd are experts at finding edge cases that in-house teams can often overlook.

Manual regression

- Testers validate that bugs reported by the testing process, which your team have marked as fixed, have been fixed. Testers will also check that those fixes haven't caused other bugs.
- Regression testing can be completed via automation and may be better suited to it. You and your organisation will have to perform a cost-benefit analysis to determine whether it is worth investing in automation.





Where to use crowdsourced testing

Test case execution

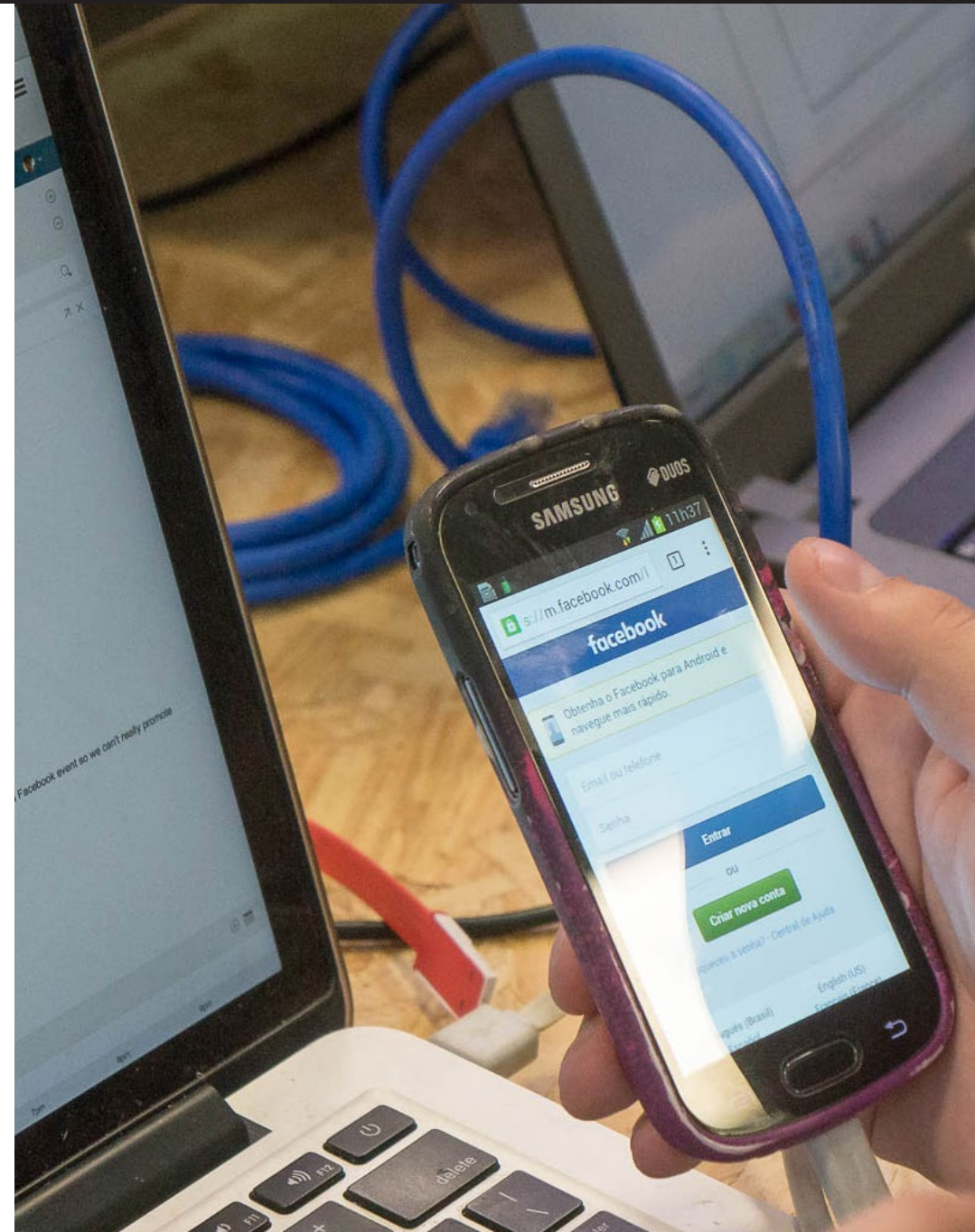
- Testers confirm a checklist outlining features and paths through your app that work as intended.
- A test case suite can be created or updated with new feature changes. They can also add to this suite with bugs that arise from previously conducted exploratory testing.

UI testing

- With UI testing, crowdsourced testers are confirming a few different things including the practicality of the UI within your app or website. UI testing involves determining the existence of bugs within specific devices, resolutions and more.
- Again, UI testing can be automated with various frameworks and virtual device labs. However, these are not foolproof and cannot mimic real-world devices in the hands of users, so be warned.

Usability testing

- Crowdsourced testers can also be used to test the usability of an app, website or specific feature. They can provide feedback on the experience and whether it delivers the stated purpose.





Where to use crowdsourced testing

- Usability testing can also bleed over into compatibility testing, especially if apps or websites are designed to be used in conjunction with one another.

Accessibility testing

- Accessibility testing is a niche specialisation for the crowd. To test this professionally, you will need to engage a specific set of testers who are able to test and confirm functionality for the accessible market.

This can include compliance with regulations and law such as DDA in the United Kingdom or Section 503 in the US.

Globalisation & internationalisation

- Looking the global market, crowdsourced testers are located all over the world. You can use crowdsourced testers to give you feedback on your app and website specific to the locale and culture they live in.

Want to get feedback on whether your app will be used in Jakarta? Done. Need to know if the 3G connection is strong enough in southern Brazil? Easy with the crowd.

- Specialised testing which is focused on globalisation and internationalisation moves you and your





Where to use crowdsourced testing

organisation past the simple translation jobs of the past. Translation is no longer enough to ensure your app or website is a top contender in a global market.

You need to blend testing strategies and optimise the feedback loops to truly dominate international markets.





How to implement crowdsourced testing

If you're sold on the idea by now (let's face it, who isn't?) you're probably wondering what you need to do and how. Don't worry – we're here to help.

What you need

- You need someone responsible for QA in your organisation. They doesn't have to be a Head of QA or a tester or even someone in that vein at all. We've worked with companies who had nobody like that. You just need someone that is in charge of ensuring the release of the product goes smoothly, without bugs.
- Ideally, you'll have a methodology to track bugs in your organisation such as JIRA or similar. But, you can also just use a spreadsheet. Lots of companies do this.
- Some money dedicated to QA. It should go without saying, but crowdsourced testing isn't free and it equates to just below the cost of a professional in-house QA tester with 3–5 years of experience.
- A dedication in your organisation to producing quality software. Bugs are going to come in and you're going to want to make sure that teams are ready to jump on them and fix them before release.





How to implement crowdsourced testing



What you don't need

- You don't need a large, in-house QA team. People often assume that a certain level of QA needs to exist already in an organisation but nothing could be further from the truth. We've worked with firms of all sizes in the past, and any firm can reap the rewards of crowdsourced testing.
- Your app or website doesn't have to be perfect and you don't need to have a perfect QA process or strategy. Using a crowdsourced testing provider like Global App Testing can actually help your QA strategy to develop over time. Most providers should offer advice and suggestions on how to best approach the testing needs for your organisation.
- You won't need a lot of money. While we mentioned above that you do need some budget, crowdsourced testing provides you with a predictable cost basis for your testing needs. This means that you are able to scale with costs that grow as your application grows. Because the cost of the testers themselves is absorbed by the crowdsourced testing firm, you don't have to worry about the financial burden traditionally associated with hiring and retaining people.

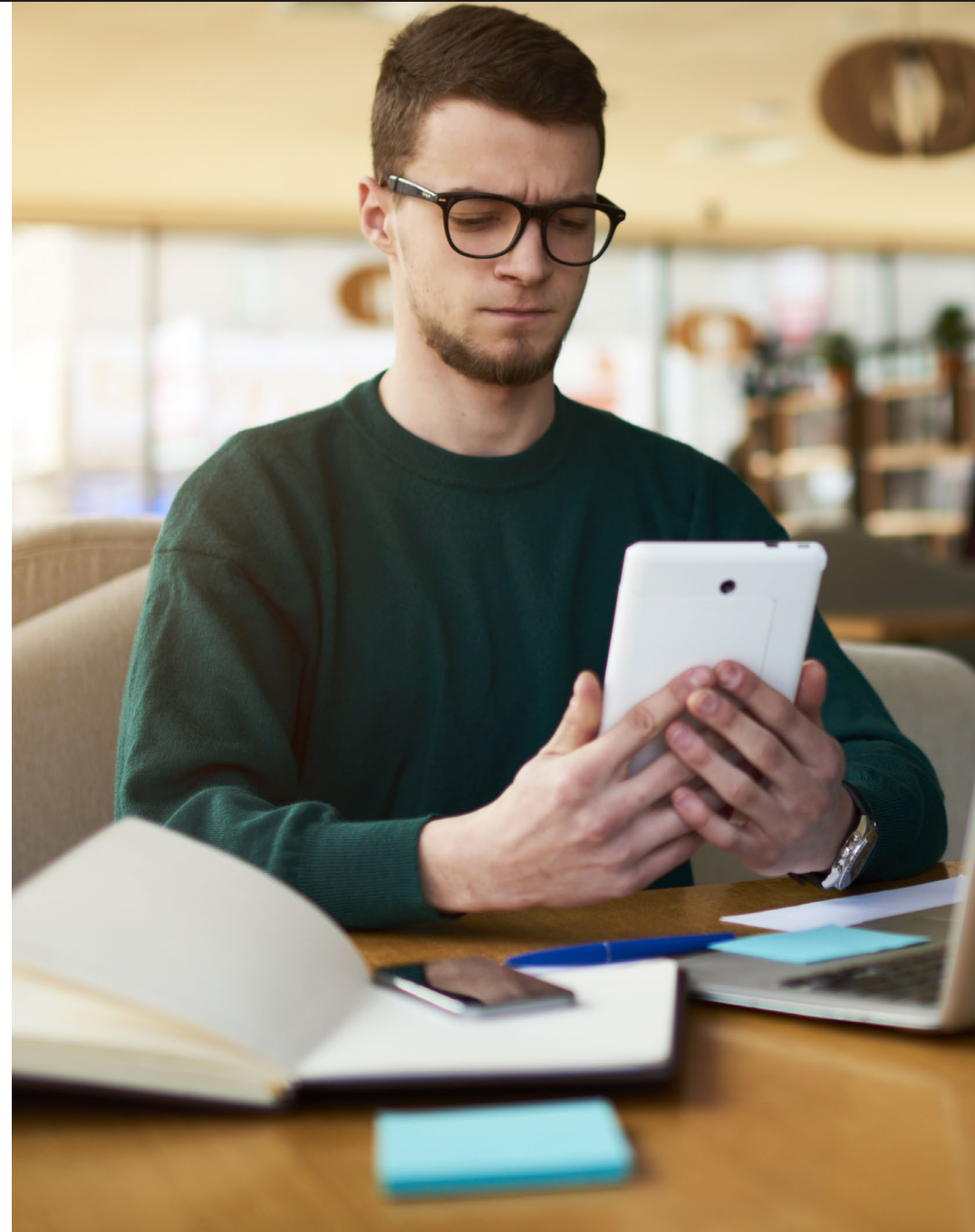


How to implement crowdsourced testing

What you should do with the results

- Be ready to operationalise the results within your organisation. By putting the results you get from the crowd testers into your development stream early and frequently, you can reduce the time it takes to have developers release. Developers don't have to [switch contexts](#) because they receive timely feedback on their features or code and thus can make adjustments as they go.
- Analyse the results and triage them for the most impact. While it is true that a good crowd testing company will moderate the results, you still should do a little in-house triaging to ensure you focus on the most important, customer-impacting issues.

Working with a large multimedia company we discovered an employee engagement application was riddled with bugs. The company was initially focused on fixing bugs which weren't customer-centric. We suggested they focus on the bugs which damaged the customer experience so as to maximise the potential user experience and thus encourage growth.



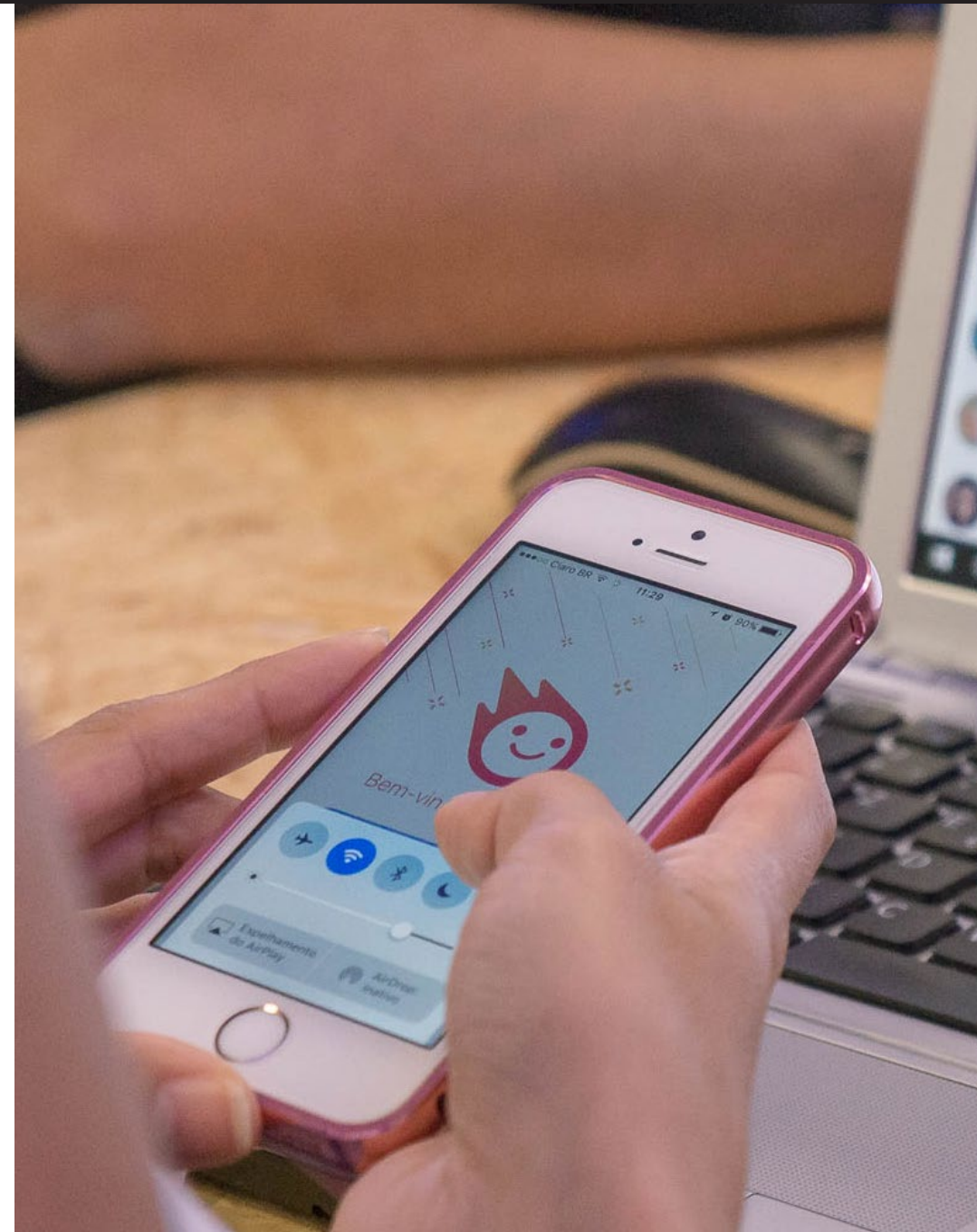


Conclusion

Once you've got an idea of what it takes to use crowd testing in your organisation it now becomes imperative to choose a vendor. Picking a vendor can be tricky because each one sets forth different pricing schemes, approaches and methods.

Here are some suggested questions to ask:

- How do you get testers into your crowd?
- Who moderates the testers' results?
- Have you tested XYZ type of application before?
- Can I request XYZ location for a test?
- What is the turnaround time for XYZ type of test?
- Are your testers using real devices?
- Are your testers verified?





Conclusion

After selecting a vendor, it's time to start reaping the rewards of your hard work.

The more effort you can put in to make the vendor relationship work, the better the results of the testing. As you begin to get comfortable with using the crowd as your source of testing, think about other ways you can introduce this type of testing throughout your organisation.

We've worked with plenty of organisations who expand crowd testing outside of the traditional QA/software realm (we cover that in our bonus section below).

Leveraging the power of the crowd puts you firmly in the driver's seat for delivering high-quality software when frequent delivery matters.





Contact Us

Ready to leverage crowdsourced testing in your organisation?

[Contact us for your no-obligation quote](#)

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Leveraging Crowdsourced Testing Outside of QA or Engineering

Maybe you aren't a software engineer, QA or CTO who is in charge of frequent software delivery and are wondering, how can crowd testing help me?

There are many good uses for crowd testing. Good product managers, for instance, will often want to know how their product is faring in a specific area compared to a competitor.

Or, they may want to find out whether a certain feature or function will be a big hit when it launches somewhere. By using crowd testers for these efforts, product managers can effectively receive insights that can shape the future of a product.

A very popular social media platform utilised this line of thinking recently with Global App Testing as their product managers needed to know whether a certain function within their marketplace application would be of use in Canada.

Global App Testing was able to deploy a crowd of testers to facilitate functional testing and usability testing for them and





gauge how successful the end product might be.

What would have cost tens of thousands of dollars in market research time and effort was simply part of their regular monthly plan.

Localisation + Growth

We briefly touched on the benefits of localisation above, but there is an additional benefit to using the crowd that should be considered. If you can use the crowd to truly localise and internationalise your products, you can completely dominate and capture your market.

What exactly does this entail?

Through the process of localisation, you can gain deep insight into what the users in an area want and how you can deliver on those demands. Take Uber, for example. Uber has a highly successful ride-hailing service which works flawlessly.

They were experiencing rapid growth through expansion into new territories by simply opening up the application and infrastructure to new locations.

During this expansion phase, Uber were content to launch in a new area without much research or work. Yet they ran into an interesting stumbling block in Jakarta. Jakarta runs mostly on mopeds.





It is densely populated and cars have a hard time travelling through the area. This makes the Uber app essentially useless. They also ended up being deemed illegal for a short period of time.

Had Uber worked with a crowdsourced testing team in Jakarta or Indonesia, they would have been able to address some of these issues before spending resources where return is limited.

