# **Ultimate Mobile Image Search Checklist**

Mobile Image Search is powerful new technology that invites your consumers to get instant visual search results by simply snapping a picture. Now you can activate your advertising, catalogs, coupons—even your products themselves—and allow your customers to scan them for detailed product information, videos, reviews, links as well as add items directly to cart.

This checklist is designed to help you and your team evaluate the various factors, concepts and solutions for mobile image search — and ultimately settle on the best option that meets your business needs. Things to consider when selecting a technology solution:

## Less waiting, more buying.

Customers will be scanning anything and everything — sometimes on-the-go. Mobile users are willing to wait an average of three seconds for a page to load — so make sure results meet or exceed this expectation.

## Results-oriented, solution-driven.

All solutions are not created equal. When a user scans an image, what should their experience be? Some brands are looking for solutions that simply add an item to cart or link a user to a product page. But think about the experience from the perspective of the user: what would help them complete the purchase? Typically, users want to see all the options before completing their transaction: sizes, colors, prices, alt images, ratings, reviews—and even videos. Be sure the results you present users will provide them with all the information they need.

### Frustration-free.

Take the guesswork out of matching products. If there are multiple items in an image, each one should be able to be accessed independently. Ensure the app is fast as well as accurate and you'll delight customers and drive purchases.

## Easy integrations.

With options on the market ranging from Open Source libraries to full-featured native applications and SDKs for top platforms — preparing your team for the integration is paramount. In addition to a website integration to supply product data, consider SDKs for the app and features such as add-to-bag.

### The Checklist:

Potential Core Feature Requirements	Syndeca	Solution 2	Solution 3	1
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Works with our existing native app(s)	Х	
Provides a branded stand-alone app if necessary	Х	
Easy to implement SDK and APIs	Х	
Returns image results in 3 seconds or less	Х	
Works offline	Х	
SDKs for iOS and Android	Х	
Ability to scan 1D barcodes	Х	
Ability to scan 2D barcodes	Х	
Ability to scan 2D images, packaging, images	Х	
Ability to scan products (on the rack or on people)	Х	
Provides contextual results, not just a link	Х	
Ability to upload and tag content instantly with a simple automated workflow]	Х	
Includes video in results	Х	
Ability to socially share image results	Х	
Ability to socially share product results	Х	
Includes detailed tracking and analytics	Х	
Offers fast implementation	X (2 weeks)	

Potential Pitfalls	Syndeca	Solution 2	Solution 3
Requires the user to download a third party app	No		
Requires maintenance from internal	No		

ecommerce or app team		
Requires maintenance from internal backend / IT team	No	

## The Tough Questions:

# 1) Build or buy?

Do you have an internal IT team? Do they have bandwidth to build something from scratch? If so, there are numerous open source projects that can get you started. As a place to start, check out OpenPR (openpr.org) and OpenCV (opencv.org). However, building a solution in-house can be a major undertaking. In addition to building and testing a robust pattern recognition algorithm, your native apps will need APIs or an SDK in order to integrate. Additionally, web-service based image recognition requires significant server-side resources to handle requests. Designing and maintaining a hosted solution that will scale with your users as adoption increases can be a full-time job in itself.

# 2) Invisible Watermark or Image Recognition?

To enable image recognition, some technologies rely on embedded invisible watermarks, which are helpful when multiple versions of the exact same creative need to link to different places or track the scanning independently. However, this technology requires images to be processed prior to printing and distribution. This can translate into more work for your production team to implement and manage and has no support for non-planned or retroactive scanning of previously developed assets.

While proponents of invisible watermark technology tout its speed, on-device image recognition is just as fast and doesn't require any pre-processing of images. The result? Any image previously published in-market, in social media or in-store can be added to the experience without requiring any additional work from your print team.

[potential sidebar] Image recognition offers two processing options: server side and on-device. Server side processing allows for a larger number of images (10,000+), but requires images to be uploaded to a server — and significantly increases the amount of time your users are waiting for results.

## 3) What should to be scannable?

Print. Catalogs. Packaging. Advertising. Billboards. Products. Let your imagination run wild. But as you develop your scannable wishlist, think through the user experience—both from your customers point of view as well as your marketing department.

For instance, what happens when a user scans your signage? Are they linked to your website or a video — or a rich digital version of the signage with tagged content, shoppable products, videos and a link for more information? How do you maximize the rich experience?

## 4) How long is acceptable for a user to wait for results to load?

Based on numerous user studies, the unanimous decision is zero to three seconds (at the most). So when you're evaluating options, use that as your benchmark. If you have to wait 10, 20, even 30 seconds (as we've seen with some third parties), you can bet your customers won't use the feature again and — by extension — may think poorly of your brand.

# 5) What about accuracy of results?

What's worse than waiting 20 seconds for results? Waiting 20 seconds for bad results—or no results at all. Make sure your technology solution offers exceptional indexing of your merchandise and assets and a great customer experience, no matter what the user scans.

## 6) What do the results look like?

A list of products, a link to a website, or a dedicated visual search results page? No matter what your business is, make sure the 'post scan' experience is unparalleled. From what we've seen, the majority of users don't want to scan a product and have it end up in their shopping bag. They want to explore and see product details, videos, reviews and more.

## 8) What to consider for the future?

Technology moves at a rapid pace. Make sure you choose a direction or a partner that's in it for the long haul. Commit to a flexible plan that encourages improvement, innovation, and ease of upgrades.

### **Action Plan:**

Identify budget and high-level timeline
Establish program KPIs
Research and schedule vendors demos
Discuss implementation with Mobile App and/or backend IT team (if applicable),
including maintenance plan
Compare offerings using the checklist provided
Request costs, timing and program details from providers
Develop a marketing plan for feature promotion
Track adoption usage and ROI