







In the first part of our JavaScript MV* framework comparison we introduced AngularJS, Ember, Backbone.js and the newcomer React, we showed some code examples and discussed their strengths and weaknesses. In this second part we are going to have a look at their market share, community support and estimated growth to help you make the right decision for your SPA.



Market Study

The following table lists the 4 frameworks alongside the year they were introduced, their origin or enduring dependency, their main contributors and an overview of popular sites using them. It's worth noting that every single one of these frameworks is run by (or mainly used by) one of the big players of the web:

- Ember is used by Yahoo!
- Angular powered by Google
- Backbone is used to realise WordPress.com and is a part time project of Jeremy Ashkenas,
 currently employed by the New York Times
- React is introduced and powered by Facebook

Overview

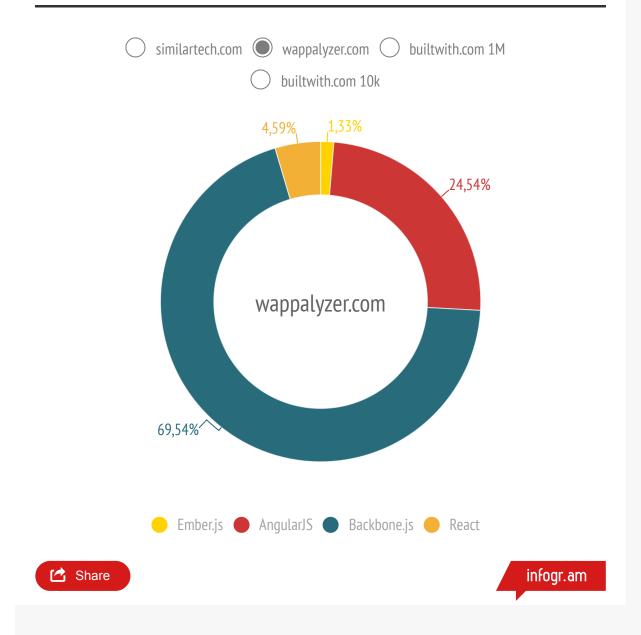
	Introduction	Origin / Base	Main Contributor	Major Sites
Ember.js	2007	SproutCore / Handlebars	Yehuda Katz	Yahoo, Groupon
AngularJS	2009	GetAngular	Brat Tech LLC, Google	Youtube (PS3), Sky Store
Backbone.js	2010	Underscore.js	Jeremy Ashkenas	Wordpress, NYTimes
React.js	2013		Facebook, Instagram	Netflix, Sony Lifelog



infogr.am

While the bare listing clearly illustrates project maturity it does not give any indication about general popularity. Stats generated by web crawlers are usually not very accurate when it comes to back-end frameworks, but in our case – where frameworks are client-side and, needless to say, detected by every web client – those stats can be pretty sound.

Market Reach



Comparing wappalyzer.com with similartech.com and builtwith.com we received significantly different results. To display the results in a more convenient way we recalculated the total



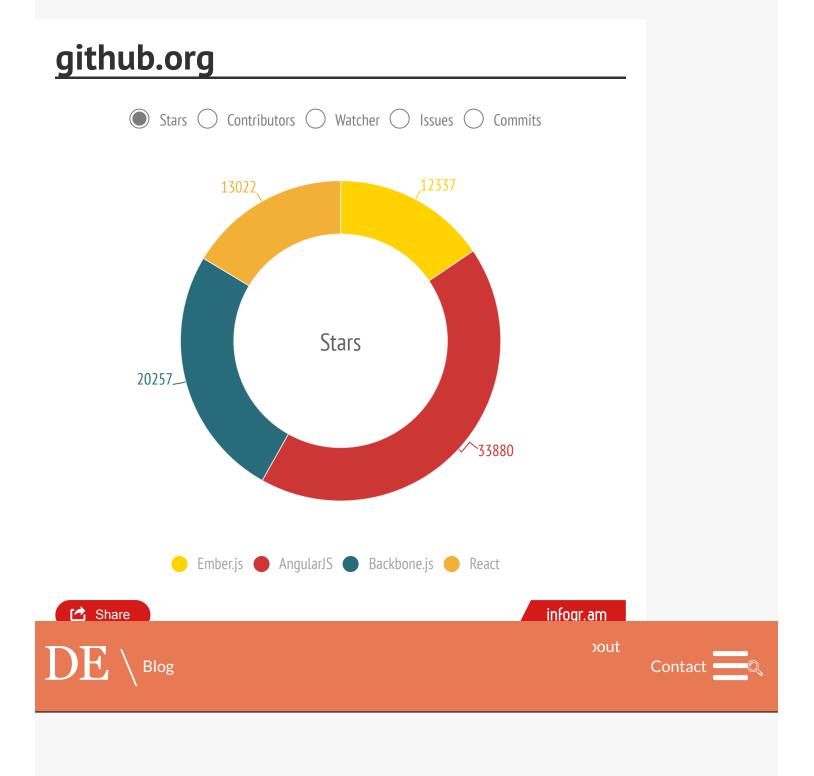
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penetration of these Frameworks. All sources show Angular and Backbone being by far the most used frameworks – similartech.com does not even list the other two since their

marketshare is too small to bother. Interesting to note that Backbone.js is used more in the Top 1K sites than in the Top 1M sites according to builtwith.com.

For you as a developer it might be more interesting to have a look at the community built around each Framework as it might reflect the amount and speed of support you will find for your upcoming projects. Therefore it is always a good idea to have a brief look at the few occasions where the community activity is shown. Since every project here is listed on GitHub a brief extraction of their stats should be helpful.



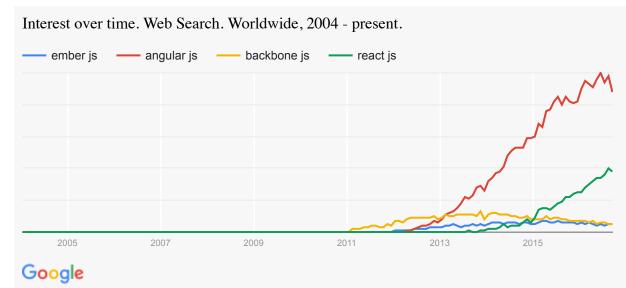
Angular was the winner of our part-1 comparison. It's no surprise to see Angular again as one of the two most popular frameworks. While it almost reaches Backbone's popularity it surpasses all competitors from the developer community site: Most stars, most contributors, most watchers, most issues (judge yourself if that's good news), and a large amount of commits. When it comes to this kind of stats the number of git commits since the initial deployment plays a huge role: Ember, for instance, has the most commits. Impressive! But keep in mind: Ember had six more years to collect these commits compared to React. Taking things into perspective, React has more stars (already) than Ember although it is barely out of its childhood compared to the other almost ancient players.

Despite not being visualised here Stackoverflow.com displays Angular in the best possible light as it counts more than the double amount of posts than Backbone and Ember together and over 65 times more than React!

We do realise this is a snapshot in time and might well be outdated by the time you read this post. Which leads to the following question: Which of those frameworks is worth investing in the (near) future? The question is especially relevant for React as its popular contributor Facebook is well-known for the ability to establish new technologies, be it software (Hadoop) or hardware (open compute). Are we close to witness a new star rising on the MV* Framework horizon?

Google Trends has always been a faithful companion to get an idea of how popular a topic is and, by looking at the development over time, how popular it might be in the future. While different search terms around the same topic might bring different results, you can still get a general idea for each framework. The fact that these terms appear around the same time the frameworks were introduced proves our point as being representative, at least to some extent.





View full report in Google Trends

What this graph for sure does is manifesting Angular as the most popular Framework. Moreover, fascinating to note, Backbone's popularity seems to be stabilized or even decreasing over time. Same can be said by looking at Ember. Are they already over their peak and now losing momentum? While Backbone's market penetration might already be too deep to just disappear from the market, fate seems uncertain for Ember.

No doubt, the most astonishing trend is React's. While writing this blogpost, we had to rewrite this section three times in two months:

December 2014: Backbone and Ember are closely followed by React. =>Respect!

January 2015: React catching up and passing by its competitors. => Impressive!

February 2015 (partial data!): React's popularity outruns Backbone and Ember by far and is the runner-up to Angular. => Speechless!

According to Google Trends, React has risen from zero to a fourth of Angulars popularity within 1.5 years without showing any kind of flattening of their popularity curve. If React keeps up its progress we might see a new rival of the popular Angular at least as far as the View component of the MV* frameworks is concerned.





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techieBrandon • 2 years ago

Backbone being such a brief read (and first to market from what I remember) it is easy to understand why the adoption rate is so great. It also has a great deal of flexibility and isn't overly opinionated. Having designed/implemented/lead teams professionally on multiple large dynamic projects with both both angular and backbone I tend to like backbone for complex tasks and angular for the more linear designs. I've found angular to be extremely opinionated (very good reasons for their choices) and sometimes I have a requirement that doesn't fit nicely. Feeling behind the ball having not done anything with react.

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