Deep Dive on ANGI

Disclosure: I am long shares of ANGI

I have taken a slightly different approach in this month's deep dive. Given the length of my deep dives, I have outlined six different sections to help readers navigate and know beforehand what to expect.

Here are the sections below, and a short brief on what I have discussed in each of these sections.

Section 1 ANGI Economics: In this section, I have mentioned the portfolio of brands ANGI owns and elaborate on the TAM of the marketplace, including discussion related to marketplace economics from consumer, Service Professional (SP), and ANGI's perspective as well as ANGI's advertising business.

Section 2 How the business model is changing and why it makes much more sense: I have discussed why market penetration of online homeservices is likely higher than we think, why the old model was perhaps flawed, and the fixed price model solves many of the problems ANGI has faced.

Section 3 Bear arguments, and mitigants (if any): I have touched upon some arguments bears highlight against ANGI: capacity constraints of Service Professionals (SP), disintermediation risk, intensifying competition, and the Google threat.

Section 4 Valuation model, and what it implies: I have explained why the reverse DCF indicates that the bar is pretty low for ANGI to generate a decent return for its shareholders.

Section 5 Management incentives: Management's comp and target operating metrics are discussed in this section and what this means for ANGI shareholders.

Section 6 Final words: Parting words on ANGI, and discussion on weight of ANGI on my portfolio. Finally, I will have a short discussion on my other personal portfolio holdings to frame ANGI's weight in perspective.

Let's begin.

Section 1: ANGI Economics

ANGI owns a portfolio of brands related to online marketplace for homeservices in multiple countries, as shown in the table below. In 2019, ANGI generated 94.2% of its revenue from North America. Within North America, majority of the revenue comes from HomeAdvisor which is followed by Angie's List. I will primarily focus on HomeAdvisor, and Angie's List, but business models in other countries are largely similar to the HomeAdvisor model.

Brand	Geography	Brief Description
HomeAdvisor	USA	Digital marketplace connecting Service Professionals (SP) and consumers looking for home repair, maintenance, and improvement projects. More will be discussed later.

Angie's List	USA	Online directory which consumers can access and check crowd-sourced reviews of local businesses/SPs in over 700 service categories. More will be discussed later.
Handy	USA	Two-sided platform connecting consumers and SPs. In addition to that, consumers buying furniture/home appliance items from certain third-party retailers can simultaneously choose to purchase assembly, installation, and related services by Handy SPs at a fixed price.
mHelpDesk	USA	Software solution/app to help SP with estimates and invoices, manage employees and scheduling, and access customer information.
Fixd Repair	USA	Home warranty solution and service provider to help homeowners to file warranty claims, connect with service professionals and schedule home service visits.
HomeStars	Canada	Canada's leading online platform connecting homeowners and 2 million contractors for home repair/renovation etc. ANGI owns 90% voting interest.
Travaux	France	France-based marketplace connecting consumers and SPs.
MyHammer	Germany	Germany’s leading online marketplace for homeowners to find SPs. Publicly listed on Frankfurt Stock Exchange and current market cap is EUR 130 Mn (YTD +42%). ANGI owns 81.6% interest. It also operates in UK, and Austria.
MyBuilder	UK	UK’s largest online marketplace for homeowners to find SPs. ANGI owns 75% voting interest.
Werkspot	Netherlands	Customers post service request online to which SPs respond with estimates, and then customers choose based on estimates/reviews.
Instapro	Italy	Customers post service request online to which SPs respond with estimates, and then customers choose based on estimates/reviews.

ANGI’s revenues are segmented into two broad categories: marketplace revenues (~80%), and advertising revenues (~20%).

Marketplace economics

Although ANGI has a portfolio of marketplace brands related to homeservices, supermajority of its marketplace revenue comes from HomeAdvisor. While ANGI does not disclose marketplace revenue by brands, we can confidently infer this. For example, according to [SimilarWeb](), HomeAdvisor had ~20x more visit to its site compared to Handy over the last six months. Please note that while discussing marketplace, I will just mention ANGI which is the ticker of the company. Don’t confuse it with the brand “Angie’s List” which is an online directory to be discussed later in this report.

In the marketplace, there are three parties here: consumer, SP, and ANGI. The economics of the marketplace from each of their perspectives is shared in the following table, much of which I re-created from a Deutsche Bank report published in May 2018. I will provide more details and explanation following the table.

The Consumer Side of Equation	2019A	Comments
Step 1: Consumers Make Service Requests		
Total Visits ('000) to Marketplace (HomeAdvisor, and Handy)	261,440	https://www.similarweb.com/website/homeadvisor.com/#ove
(x) % resulting in service requests	10.5%	Implied
(=) Number of Service requests ('000)	27,376	Reported
Step 2: ANGI can fulfill some requests		
Number of Service requests ('000)	27,376	From above
Number of monetized requests ('000)	16,068	Reported
% of service of requests	58.7%	Calculated
Step 3: Consumers Select SP to perform the job		
Number of monerized requests ('000)	16,068	From above
(x) Number of leads per monetized requests	2.0x	Implied multiple required to get to $20B GMV this year
(=) Number of leads provided ('000)	32,136	
(x) % converts into a job	25%	1 in 4-5 leads converts to a job, as per ANGI
(=) Number of Jobs completed ('000)	8,034	
(x) Avg. project value per job	$ 2,500	Avg. job value $2-3K, as per ANGI
(=) GMV on the platform (USD Mn)	20,085	Reported to be $20B in August, 2020 Investor presentation.
Marketplace Economics		
SPs pay subscription fees		
Avg. number of SPs on the platform ('000)	217	Avg. of 2018 and 2019 number of SPs
(x) Monthly revenue per avg SP	$ 30	Implied
(x) Months per year	12	
(=) Membership subscription revenue (USD Mn)	79	Reported
SPs pay on per lead basis		
Total number of leads provided ('000)	32,136	From above
(x) avg revenue per lead	$ 30	ANGI mentioned SP pays $30-35 per match, so the implied number checks out.
(=) Consumer connection revenue (USD Mn)	973	Reported
Marketplace's take rate	USD Mn	
Membership subscription revenue	79	From above
(+) Consumer connection revenue	973	From above
(+) other	7	Reported
(=) Marketplace revenue	1,059	
(/) GMV on the platform	20,085	From above
(=) Marketplace take rate	5.3%	
Service Professtional (SP) Economics	USD Mn	
GMV on the platform	20,085	From above
(-) Direct materials	(6,628)	https://www.designbuildersmd.com/blog/what-profit-margins-
(-) Direct labor	(6,628)	https://www.designbuildersmd.com/blog/what-profit-margins-
(=) Net revenue for SP	6,829	
(-) Marketing cost on marketplace	(1,059)	Revenue of ANGI Marketplace from above
(=) Contribution margin	5,770	
(/) Marketing cost on HomeAdvisor	1,059	
(=) ROI for the SPs	5.4x	Although ANGI mentions 14-17x ROI for SPs, they define it as Job value/Investment i.e. marketplace revenue. ROI here though incorporates labor and material costs and therefore results into a lot lower number.

Consumer

Consumers can go to HomeAdvisor/any other ANGI's portfolio marketplace website/app and search for free to look for local homeservices SPs in more than 500 categories and 400 discrete markets in the US. These home services include plumbing, painting, cleaning services, and even more complex projects such as kitchen, and bathroom remodeling. Consumers can also access for free "True Cost Guide" to estimate how much it typically costs to do these projects. As per SimilarWeb, consumers visited HomeAdvisor and Handy website/app 130.7 mn times over the last 6 months. I just doubled the last 6 months data to estimate total number of visits to the

HomeAdvisor and Handy website/app which are the supermajority source of marketplace revenues.

Once the consumers share their zip code and contact details, a service request goes to local SPs who are either HomeAdvisor SP, a Handy SP, or a combination of HomeAdvisor and SPs from Angie's List (discussed later). In 2019, 27.4 mn service requests were sent by consumers which implies a ~10% conversion rate from site visits. However, not all service requests can lead to a completed project. In many cases, there is no relevant SP available for the service being requested. Last year, only 58.7% of service requests were monetized i.e. these requests could be matched with relevant SPs.

If it's a simple project and there are lots of SPs available, up to four SPs can be matched depending on customer's description of the project and review/rating of the SPs. Once a consumer is matched with SPs, it is the SP's responsibility to contact the consumer. An SP can view the customer's project details, and email address, but they do not have access to customer's phone number. They use HomeAdvisor's platform to reach out to the consumer who requested the service. It is, therefore, a lead generation service for the SPs, and not a guaranteed job service just because they were matched with a consumer service request.

On an average, I estimated every monetized transaction was sent to approximately two relevant SPs. ANGI mentioned one in every four/five leads converts to a job for an SP. An average job was worth $2,000-3,000. If we take the mid-point at $2,500, this leads to $20 Bn GMV on the ANGI marketplaces which implies ~4% market penetration by ANGI.

Estimating ANGI penetration		**Comment**
Number of owner-occupied homes in the US (Mn)	80.7	Sourced from Statista
Number of projects per household per year	6	Assumption
Average project cost	$ 1,033	Implied value of project cost assuming $500 Bn market size.
Total value of the broader market (USD Mn)	500,000	Mentioned by ANGI in August Investor presentation
ANGI GMV (USD Mn)	20,085	
ANGI current penetration	4.0%	

Marketplaces

ANGI's marketplaces make money primarily in two ways: SP subscription revenue, and consumer connection revenue. In 2019, marketplace had 220k paid SPs who on an average paid $30/month to be on the marketplace. Besides, as explained above, SPs receive lead from service request sent by consumer. Regardless of whether they actually get the job, SPs pay matching fees per lead to marketplace. While the matching fees per lead can vary depending on the nature of the project and geographical location, on an average SPs pay $30-35 per lead. Recently, ANGI has focused on fixed price contracts which I will discuss in much more detail in section 2.

Dividing total marketplace revenue by its estimated GMV implies ~5% take rates for ANGI. Compared to other marketplaces, ANGI is lagging in terms of both market penetration and take rates. While at first glance it might seem a bullish indicator, HomeAdvisor, formerly known as ServiceMagic, has been around since 1998. The fact that after all these years they still have such paltry market penetration and take rates hints at structural issues in the business model which I will discuss in section 2.

	ANGI HOMESERVICES	airbnb	Uber	BOOKING HOLDINGS	Zillow	GH	Etsy	ebay
Vertical	Home Services	Rentals	Ride Sharing	Travel	Real Estate	Food Delivery	eCommerce	eCommerce
Total Addressable Market by Segment	$500B	$150B	$200B	$603B	$87B	$250B	$100B	$2.3T
Gross Transaction Value	~$20B	$29B	$36B	$96B	$7B	$5B	$5B	$90B
Share	<5%	20%	18%	16%	7%	2%	5%	4%
Take Rate	<10%	13%	22%	14%	14%	20%	16%	8%

Source: ANGI August 2020 Investor Presentation

Service Professionals

If you browse through reddit or YouTube to look for HomeAdvisor reviews, there are plenty to go through, many of which will be uncomfortable readings if you are a shareholder of ANGI. I think all negative online reviews in forums such as reddit need to be taken with a grain of salt. While it can be a great source for understanding pain points of stakeholders, we also need to acknowledge that people with grievance or negative experience are far more incentivized to share their experience online. I have watched tens of videos on YouTube and went through several reddit discussions. Of all those discussions, I think this particular Youtuber depicts a more measured and nuanced review of ANGI with actual number of leads he received in the first 30 days and 90 days after signing up for HomeAdvisor. These numbers track closely to the numbers shared by ANGI. The average job value appears lower since the average value per job is on the lower side in the pressure washing industry (the YouTuber's service category) compared to some of the other homeservices categories (think kitchen/bathroom remodeling).

YouTube Channel: Power Clean		
HomeAdvisor	**30 days**	**90 days**
Total number of leads	41	96
Total $ spent by SP	1,397	3,143
Average $ per lead	34	33
Jobs awarded	14	26
% of leads converted to job	34%	27%
Total Revenue $	7,800	17,499
Average $ per job	557	673

ROI on $ spent on HomeAdvisor	16.3x	20.6x

Unless you meticulously track your numbers, any SP can feel aggrieved because of the way the business model is designed i.e. the requirement to pay for the lead even when it does not lead to a job. Although ANGI refunds SPs if it were low quality/bogus leads, you can imagine what constitutes "low quality" is pretty open to interpretation, and more often than not, HomeAdvisor and SPs have very different definition of that. I will discuss more later why despite the appealing ROI on dollar spent on ANGI marketplaces, so many SPs can have legitimate complaints and why I think that is hurting ANGI's ability to penetrate this market.

Although ANGI calculates ROI from SP's perspective as dollar spent on marketplace divided by awarded job value, SPs obviously incur material costs, and labor costs which, according to this article, typically both consist of 33% of the revenues each. Even when we take these costs into account, ROI still remains close to ~5x on the dollar spent.

Advertising

The vast majority (>80%) of advertising revenue comes from Angie's List; therefore, I will just focus on that. Since advertising is just 20% of total revenue and likely to continue to lag marketplace revenue growth going forward, I will keep this discussion short.

Angie's List is a nationwide online directory matching customers and SPs across 700+ categories of service. It was acquired by IAC in May 2017 for $500 million and post-acquisition, IAC combined it with HomeAdvisor in October 2017 to form a new public company named ANGI Homeservices. IAC owns 84.1% of outstanding shares of ANGI, and controls 98.1% voting power.

Although most customers use it for free, it used to be for paid members only till 2016 when they decided to choose a freemium model. There are two paid subscription still available: Silver ($24.99/yr, and Gold ($99.99/yr). Paid members receive higher level of customer support, and exclusive promotions. Earlier, even reviews and ratings of SPs were behind the paywall.

Monetization of Angie's List primarily happens via SPs advertising on the platform. It has 37k SPs on the platform. Once an SP passes the background screening, they buy term-based advertising to receive certification. SPs sign up for an annual contract whose amount varies depending on the geography and service category. SPs can cancel the contract anytime they want, but they are required to pay a 25% penalty of the remaining value of the contract. On an average, SPs spend ~$600/month on advertising on Angie's List. Some leads from Angie's List can also be directed to HomeAdvisor. As per SimilarWeb, it receives half the monthly visit (~10 mn vs ~20 mn) compared to HomeAdvisor.

The YouTube channel I mentioned earlier also did a good review on Angie's List and shared his number of leads in the first 30 days and 150 days after signing up for Angie's List. In terms of ROI, the numbers look slightly lower compared to HomeAdvisor.

YouTube Channel: Power Clean		
Angie's List	**30 days**	**150 days**
Total leads	14	46
Total $ spent	300	1500
Average $ per lead	21	33
Jobs awarded	8	21

% of leads converted to job	57%	46%
Total revenue	2,650	11,100
Average $ per job	331	529
ROI on $ spent on HomeAdvisor	15.5x	16.2x

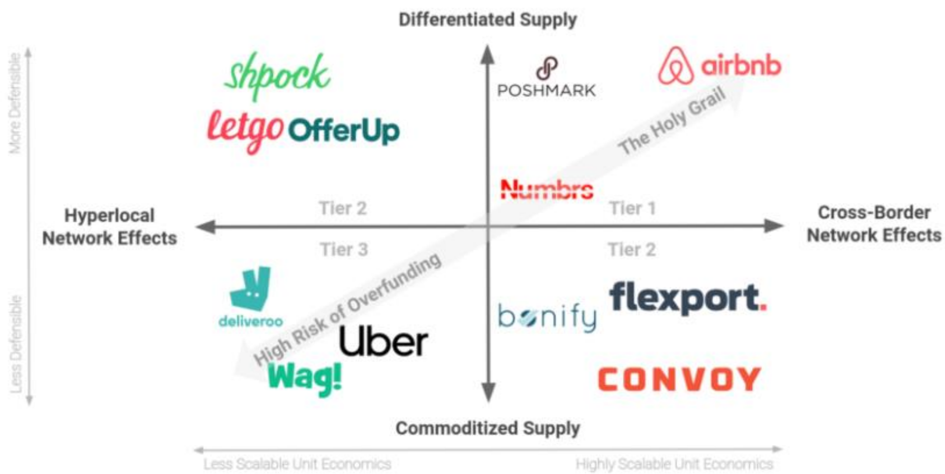
Section 2: How the business model is changing and why it makes much more sense

Before explaining how the business model has been changing, and why it makes much more sense, it might be helpful to first understand the pain points of the status quo business model.

To elaborate on the pain points, let me first start with a quote by ANGI CEO in a recent podcast he appeared:

> *We've been in business for more than 20 years. It's an incredibly complex problem in terms of solving home services and it's complex for two reasons. One is almost a math challenge and the other one is really about human behavior.*
>
> *From a math standpoint, we serve all of America, we serve every single zip code and there's well more than 500 different types of projects that we do. They're about 42,000 zip codes in America. If you combine the zip codes and the 500 plus services, you almost have what you can think of as 20 million micro markets where you have to have humans available to deliver services and you have to balance supply and demand. It's an enormous problem from a scale standpoint.*
>
> *On the human side of it, unlike, let's say a service like Uber where you can pretty much go out and find and mint new drivers really easily because almost everybody knows how to drive. In home services, these are oftentimes craftsmen, people that not only have but need to have many years of experience.*
>
> *For many of these types of projects you think about things like wood floor refinishing, or remodeling or you name it, lots of complicated types of projects. You can't just go create these businesses so you have to work with the economy as it exists. The combination of those two things makes this, I think in order of magnitude or perhaps a couple of orders of magnitude more difficult than perhaps like the idea of creating a service like Uber.*

This quote reminded me the marketplace quadrants that I mentioned in my Etsy deep dive: how marketplaces can be categorized along the axis of network effects and the nature of the supply side of the marketplace. ANGI is likely to be tier 2 marketplace (see recommended reading list to explore more) in the fourth quadrant. While the suppliers within a particular service e.g. cleaning services can be somewhat undifferentiated, the marketplace aggregate suppliers in 500 categories of homeservices which make the nature of the overall supply differentiated. But it also has very hyperlocal network effects on a zip code by zip code basis.



Even beyond the challenges mentioned by ANGI CEO, I could think of some other challenges that make life difficult for the marketplace. I believe there are even deeper fundamental differences between ANGI and Uber (or Etsy) as a marketplace.

Let's focus on the supply side of the marketplace to make my point. When Uber enters a market, they don't need to convince the existing taxi drivers to leave their taxis and sign up for Uber. A significant percentage of Uber's drivers are basically people who are just driving part-time and looking for a new avenue of income which also provides ample flexibility in hours. 70% of Etsy sellers are part-time sellers, and most sellers are just one-person shop. Etsy too has created an army of new sellers.

ANGI, on the other hand, not only failed to create this vector of new supply, but it also is trying to convince the existing supply to move to a model that is arguably inferior to many of the SP's existing business model. SPs currently get the vast majority of its leads via word of mouth. The success rate of this word-of-mouth leads to convert to a job is much superior to ANGI's model (20-25%). On top of that, word-of-mouth leads are free whereas they have to pay for leads even when they don't convert to a job. What really adds salt to their wounds is many of these leads are low quality (the customers have no intention of hiring an SP) or customers are just price shopping. ANGI does refund for extremely low quality leads i.e. if contact number is not valid, or if customers do not pick their phone after multiple attempts within 24 hours, but as mentioned earlier, what constitutes as "low quality" is open to interpretation. In many cases, SPs and ANGI does not meet eye to eye in that interpretation. Also, think about the process of calling back customer care, explaining why it's a bad lead, and arguing if ANGI does not agree: the whole process is riddled with multiple touch points for SPs to feel aggrieved and deeply annoyed. Just watching YouTube videos made me realize these are no-nonsense, hardworking people, and ANGI's current model leads to too many not-so-fun experiences for them.

Moreover, the cost of failure is higher for an SP on ANGI marketplace compared to drivers on Uber or sellers on Etsy. When you sign up to drive for Uber, there is no signup cost, and in fact, in many cases you may receive sign up bonuses. After driving for a while, if you think this does not make sense for you, you can stop driving without any extra cost associated with it. Etsy sellers pay $0.25/listing. If you open an Etsy shop with 10 listings and none of your product sells, it costs you $2.5 for your failure to sell your products (ignoring the cost of making those products).

Now think about an SP on ANGI. An SP on Angie's List, for example, needs to sign up for an annual contract. That's a significant upfront investment for an SP. On HomeAdvisor, since an SP pays per lead, he/she pays to ANGI on an average $30-35 per lead even if he/she does not get the job. If you are new to a particular line of work, it is possible it takes you a while to get what sort of price to quote to get a job or many other intricate details to understand how to make this thing work. Unfortunately, while you are on your learning curve, you have to endure through paying those lead fees to ANGI. Even worse, it could be the case that you can actually be a great SP in your area, but you may not have the best response time to service requests or you may not be as polite as the other SPs who are also calling the customer back or you may just have a different accent that the customer did not like over the phone. There could be many different reasons for you to not getting that job that are not related with the skills required to finish the job successfully, but you would still pay for those leads. The whole thing can leave a bad taste to the SPs who may fail to get much traction on the marketplace.

Given the considerable frictions compared to other marketplaces I outlined before, it is perhaps no wonder that homeservices are lagging to move from offline to online. I think ANGI understands the frictions and is actively trying to make a new business model: fixed price contracts to work.

In the fixed price model, customer goes to the app/website, selects a service, pays a predetermined price, and waits for an SP to show up at a time that the customer selected. SP gets a guaranteed job, but instead of paying for the leads that may or may not convert to a job, he/she pays a take rate to ANGI. In essence, the SP may eventually pay more in this model by sharing the revenue, but all the hassle of calling customers right away, haggling with them, and then haggling with ANGI about the quality of the lead are eliminated. While ANGI may have to invest more incremental dollar to make the model work in the initial few years, over time they will have a marketplace that enjoys ~3-4x take rates and potential for higher liquidity on the platform (more SPs), and other optionality such as payments and financing. Now that's a marketplace I can get behind!

Currently, 10% of all the service requests are under fixed price model, and ANGI expects to generate north of ~$150 mn revenue this year from this segment. ANGI mentioned in the recent earnings call that over the next 5-7 years, they expect fixed price to be half of the business.

In the Q2 earnings call, ANGI mentioned it has so far been able to incorporate 200 of the 500 types of projects that ANGI serves in the marketplace under the fixed price model. The initial goal is to target $50 Bn TAM with low ticket (<$200) high frequency projects. The next goal is to target other categories of service ($5k ticket) to make the TAM $200 Bn under fixed price model. One might wonder why not ANGI just completely revamp the model, eliminate the old model, and make it a fully fixed-price marketplace.

ANGI is focusing at first primarily on high-frequency and relatively standard service categories, but after a certain point, things will probably get too complicated to price under fixed-price model (e.g. kitchen/bathroom remodeling).

Moreover, think again about the "math" problem ANGI's CEO mentioned earlier. ANGI operates in 42,000 zip codes in the US across 500 categories of services. It is practically impossible to come up with fixed prices for all sorts of services across geographies. In fact, it will be a herculean task if they can manage to make fixed price model half their business in 10 years. And while it may sound unintuitive, I really, really like the fact that it is going to be excruciatingly difficult for ANGI.

Ben Thompson recently wrote a piece titled "Playing on Hard Mode". I am not going to quote him since I would highly recommend you reading the whole piece. Although he did not mention ANGI, it reminded me why playing on the hard mode is perhaps ANGI's ticket to immunity from the Google (any other competitor) threat.

If ANGI continues to play on the easy mode, Google will always loom large in the background. But if ANGI transforms the marketplace under fixed-price model service category by category in zip code by zip code basis with the ability to offer discount or demand-based pricing on certain days for certain services, they would build a real moat around their business. A business with such moat would be substantially more valuable than its current market cap suggests.

Of course, just being willing to play the hard mode does not mean success by default. But it's certainly a move in the right direction. While there are competent competitors out there, there is perhaps not a single competitor for whom it is an existential question to make it work by playing on the hard mode. I will elaborate more on competition in the next section.

Section 3: Bear arguments, and mitigants (if any)

There are several bear arguments that I would like to discuss: Supply side constraints of the marketplace, risk of disintermediation, intensity of the competition on the demand side, and the Google threat. ANGI is somewhat a controversial stock, so I am sure I won't be able to touch on all the bear points, but rather focus on the primary bear arguments I have repeatedly come across.

Supply side constraints

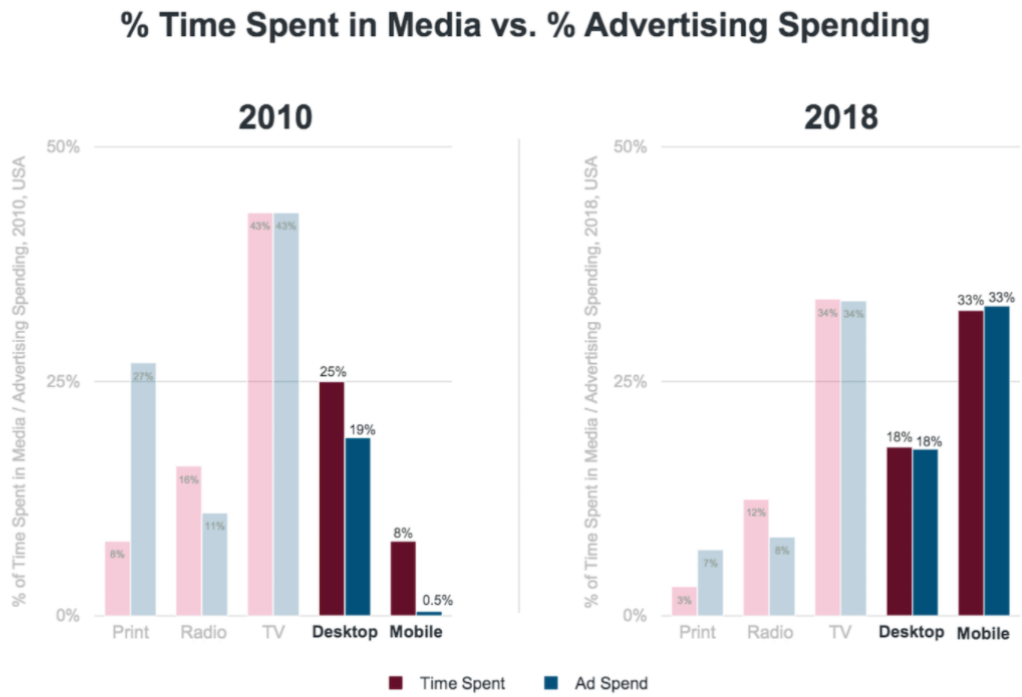
Service requests in the marketplace grew by 16.6% in 2019. In the first nine months of 2020, service requests were up by 17.5% YoY. On the other hand, monetized service request (as % of all service requests) fell down precipitously from 58.7% in 2019 to 50.9% in 9M'20. Monetizing 60% of your service request was already underwhelming enough, and now that it's in the vicinity of ~50%, shareholders are rightfully concerned. I think the sudden drop is likely to prove to be transitory in nature and will probably gradually continue to go up over the next several quarters.

As the pandemic unfolded, we were obviously locked down in our homes and people were not willing to let someone enter their house to do a job that's discretionary (~35% of ANGI's business) in nature. As a result, there was a decent backlog of service requests and SPs now just don't have much capacity to entertain new requests which affected the monetized service request numbers.

But even beyond the pandemic, I want to touch upon the general underwhelming monetization level. While ANGI is willing to match to consumer service request up to four SPs in an area, they only manage to send the request to approx. two SPs. There is certainly a capacity constraint which is perhaps fueled by multiple factors such as fewer people entering these professions, SP's lack of trust on the current marketplace business model (paying for low-quality leads) and disintermediation of ANGI for repeat work (to be discussed next). However, in the online marketplace model, aggregating demand has always proved much more important and a leading indicator than aggregated supply. Supply always tends to follow demand although the precise forecasting of such transition can be difficult.

Bill Gurley recently tweeted the following, "*A lesson I have learned many times in my 20 years as a marketplace investor is that aggregating demand is the one & only key. Aggregating supply is* *not the hard part, & having differentiated supply or thinking because you own supply you can enter the market is misplaced thinking."*

Moreover, who can forget this classic chart by Mary Meeker? At any point of time, demand-supply mismatch can exist, but the equilibrium has usually been the end state in these cases.



I am not saying if ANGI's monetization level continues to deteriorate, we need not worry about it. But it's not something that can cause me insomnia as long as service request growth stays elevated. Moreover, although ANGI has not ignited a new interest in becoming an SP (unlike Uber/Etsy), it is arguably an easier way to generate leads for a new SP in his/her area. It's not easy to get word-of-mouth based leads if you don't have years of experience, but that's not a huge barrier if you sign up for ANGI, as explained by this YouTuber.

As millennials ramp up their home ownership and cohort of boomer homeowners fades away, moving from offline to online will continue to be a powerful secular tailwind. The more important question is perhaps whether ANGI will continue to have the aggregated demand.

Risk of disintermediation

JP Morgan mentioned in 2019 that online penetration within homeservices category is ~10%. People cite such low penetration as potential secular and inevitable shift from offline to online and ANGI being the market leader will reap the awards of that secular tailwind.

I wonder whether such penetration is structurally low because of the possible disintermediation that's probably happening for repeat work. When SPs get leads from ANGI, they have access to customer's emails which they can use to reach out to customers on a regular interval throughout the year. If they get the job, they obviously go to the customer's house, and they may leave their business cards with them so that consumers can directly reach out to them for future project. This can be a problem from ANGI's perspective especially for somewhat frequent and simple projects such as cleaning services.

In the lead generating marketplace model, I don't see much mitigant to this disintermediation risk. However, in a fixed price model, ANGI has an opportunity to build a more closed system marketplace in which payments happen within ANGI's ecosystem. ANGI can provide discount for repeat job orders which might incentivize the consumer to go back to the marketplace rather than contacting the SP directly.

For infrequent, and complicated projects for which fixed price model may not work (at least for the next few years), I think disintermediation risk is low to begin with. If you are doing kitchen remodeling, you are probably not doing that again for the next 5-10 years. So even if the SP gets a lead and leave with you his card, there's extremely low probability that you will have it or remember the SP the next time you re-do your kitchen. Moreover, since these are complicated and high GMV projects, ANGI might partner with a financial institution to provide financing for such projects which again will incentive consumers to use ANGI marketplace rather than calling the SP directly.

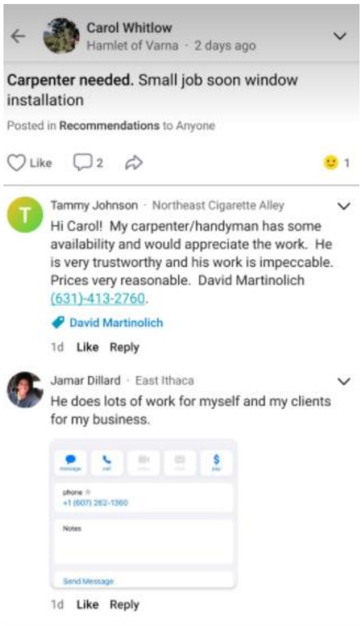
Intensity of competition

Going back to the low online penetration of homeservices, I think one other possible reason is the possibility that demand generated from online might actually get counted as offline word-of-mouth source.

If you post in your local Facebook group or Nextdoor app to look for a plumber, a friend or a neighbor might suggest you a plumber that they previously worked with and liked the person. If you call the person and give him/her the job, does that count as online or offline? While that might be deemed as "word-of-mouth", much of this word-of-mouth might not spread at all without the online world. Therefore, I am tempted to consider demand from social media sites as online rather than offline penetration. Given the significance of aggregating demand, Facebook/Nextdoor can pose a threat in aggregating demand.

While I am certain all of you intuitively understand the Facebook threat, let me elaborate a bit on Nextdoor threat. Nextdoor is the hyperlocal social networking service for your neighborhoods. I wasn't on Nextdoor, but while researching on ANGI, Nextdoor appeared repeatedly on reddit. So, I signed up to see how it works.

After sharing my zip code and area, I got a feed that's tailored to just my neighborhood. I found the following requests from people close to my home. As a consumer, I was thinking to myself this looks like a better model of hiring an SP compared to leaving my details on ANGI and getting three/four different calls from SP, hearing their estimates, and trying to gauge how good they might be to do the job. Alternately, I could just ask people close to my area who they hired and liked, and I could just go with their recommendation.



Nextdoor is looking to go public soon for a $4-5 Bn valuation. They have so far raised $470 mn from who's who in Silicon Valley (Benchmark, Greylock, Kleiner Parkins etc.). Founded in 2008, it apparently made zero revenue in the first seven years of operation, and later mentioned that it generated "tens of millions" of revenue in 2017. Even after 12 years of operation, they have 27 million MAU which seems pretty low to me. I don't know how viable this business is, but will know more when they file for S-1. If Nextdoor can make its ad-based business model work, I think it can prove to be a decent competitor of ANGI for aggregating demand.

There are multiple other competitors (e.g. Thumbtack, Yelp, Houzz, HomeServe, Amazon, and of course Google which I will discuss separately) who can be potential competitor in aggregating demand.

Yelp generates ~35% of its advertising revenue or ~$350 mn from homeservice related businesses. It introduced "Request-A-Quote" in 2016 which now covers 60 business categories. The mechanics are more clearly explained here, but in essence, it is just another lead generation source for SPs.

As I googled keywors such as "plumber near me" or "cleaning services near me", thumbtack appears near the top search results consistently. Thumbtack, founded in 2008, has even more ambiotious goals than ANGI as it targets $700 Bn TAM in 1,100 categories to connect local professionals (from lawyer to home service professionals) with consumers. So far, it has raised $423.2 M and as per its latest series F round (led by Sequoia Capital and participated by Baillie Gifford) , it is valued $1.7 Bn in the private market. Apart from the more expanded categories of services, Thumbtack basically has the same business model as ANGI. They even switched to focus on fixed price model in 2017 just as ANGI did. WSJ indicated they too might go public soon. When I spoke with ANGI Investor Relations (IR), they mentioned Thumbtack's scale is no where comparable to ANGI's. Thumbtack is also apparently particularly lax on background screening of SPs which can prove to be counterproductive in the long-term.

Three things assuage my concerns a bit:

a) Not a single competitor has a singular razor sharp focus on home improvement services. Home improvement is a subsection of many other things that they are targeting. Given the difficulty so far, I wonder whether any of them can win this game by playing the game on "easy" mode without the focus ANGI seems to have;

b) Given the $500 Bn TAM, it does not have to be winner-take-all market for ANGI to be successful. The market is perhaps big enough to accommodate multiple players. Given the hyperlocal network effects, success in one region will not automatically lead to success across the country. It is possible different companies can be dominant in different regions; and

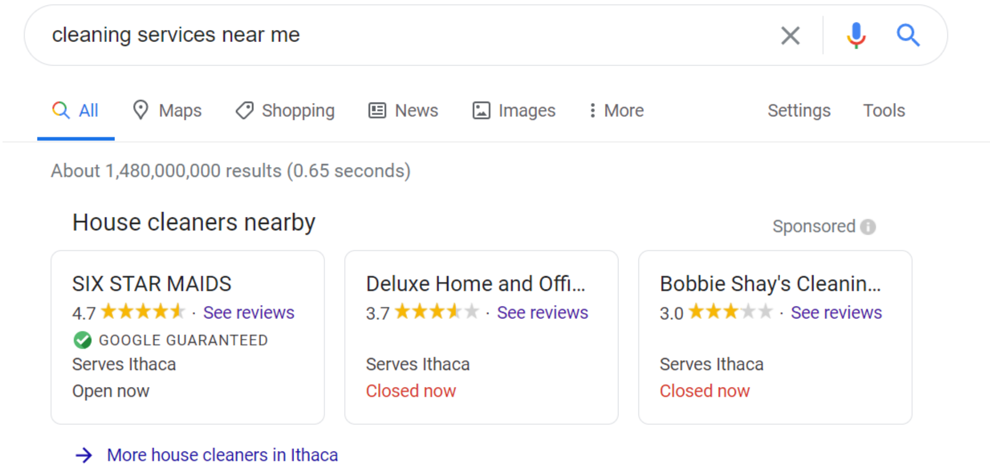
c) the difficulty of penetrating online for homeservices segment and building a marketplace around it seems to be well appreciated by the players within the value chain, as evidenced by several partnership ANGI has managed to build over the last few years. In July this year, ANGI partnered with Lowe's to provide Lowe's Pros free, year-long HomeAdvisor subscription as well as 10 free leads. Nextdoor and Facebook also partnered with ANGI over the last year or two. These partnerships are admission of difficulty of building a full-fledged marketplace on their own and the value ANGI brings to the table by aggregating the largest SP base over the years.

Relationship with Google

Google is both a friend and a foe for ANGI, but even when it is a friend, it is not the kind of friendship you can blindly rely on.

Let me explain how Google is in direct competition with ANGI first, and then I will discuss how dependency on google can potentially be a challenge for ANGI.

Five years ago, Google launched its Local Service Ads available for certain cities in the US. While it was initially available for select services such as locksmiths, plumbers, HVAC, electricians, and garage door services in 17 cities, it is now available in more than 30 regions across 58 categories, 21 of which are related to homeservices. When you search "cleaning services near me", something like the below image appears if "Local Service Ads" is available in your area. You can check their reviews, select any of the services shown in the ad, request for a quote via text or call them directly for estimates. If you select service from "Google Guaranteed" SP and don't like the service they provided, you can even ask for reimbursement (lifetime cap of $2,000 in the US) from Google.



ANGI bulls talk about how Google only addresses subset of total market in terms of both geography and service categories. While I don't think Google is trying to target 500 service categories, I believe Google is perhaps looking to hit the sweet spot by intentionally ignoring the long tail of infrequent categories of homeservices, and rather wants to focus on high frequency service categories. Perhaps search results follow pareto principle that 20% service categories account for 80% of all searches in homeservices. Given the ad-based business model, I think that model makes sense for Google.

As we already talked about the significance of aggregating demand, I think Google has an inherent advantage. Customers search for homeservices in google, and therefore SPs have a strong incentive to sign up for Local Ads Services. For SPs, the process is certainly not a worse experience compared to ANGI's. SPs can register their business, can select the type of service he/she wants to receive lead for, and then select how many leads he/she would want per month. There was no fixed annual contract to sign, so the cost of "failure" is lower compared to it is at Angie's List. Their cost per lead will vary significantly depending on their service category and geographical areas. I went to the site and played with it to gauge the cost per lead. I entered two different zip codes: 100026 (NYC, NY), and 53711 (Madison, WI) to see how much dollar it costs in each of the homeservices category in these two regions to receive ***20 leads per month***.

	Zip codes	
Category	53711	10026
Appliance repair	320-480	500-760
Carpenter	560-840	880-1320
Carpet cleaning	360-540	500-760
Countertop pro	420-640	620-940
Electrician	260-400	360-540
Fencing pro	260-400	380-580
Flooring pro	800-1200	1600-2400
Foundation pro	1420-2140	2300-3460
Garage door pro	680-1020	480-720
House cleaner	280-420	440-660
HVAC	440-660	480-720

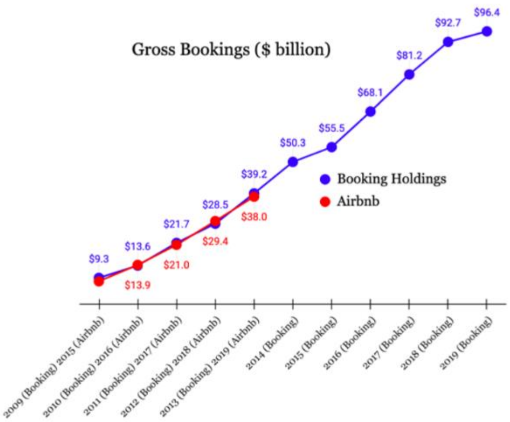
Landscaper	200-300	700-1060
Lawn care	260-400	240-360
Locksmith	200-300	280-420
Plumber	360-540	480-720
Roofer	580-880	700-1060
Siding Pro	860-1300	1080-1620
Tree service	300-460	440-660
Water damage	900-1360	1600-2400
Window cleaner	280-420	220-340
Window repair	940-1420	560-840

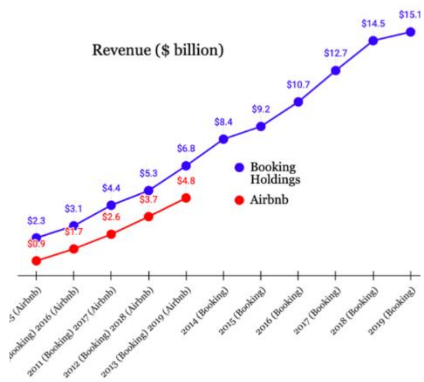
Of course, the quality of the leads can still be a problem, and the fact that even after 5 years it's only available in 30 different regions in the US indicates how difficult it has been to scale the business for Google. There is no easy standardized formula to price these service categories on every zip code. ANGI has thousands of salespeople calling SPs zip code by zip code basis trying to convince them to sign up for ANGI. I doubt Google has so many people calling SPs to let them know about this service. But it's a problem that can be solved over time if Google has the aggregate demand since as explained earlier, SPs will eventually follow demand.

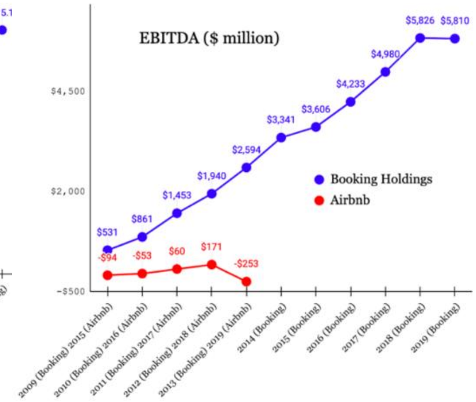
Considering Google's interest in this market, I think it is of paramount importance for ANGI (and Thumbtack) to make fixed price model work. If 10 years from now ANGI remains just a lead generation service and NOT a guaranteed job service, I have a hard time believing that they will still be in the driving seat in this market, especially in areas Google Local Service Ads are/will be available. But if it's fixed price model and they can offer promotion/discounts or even subscription as indicated by management for frequently availed services, that would be more difficult for Google to penetrate. That would also give consumers an incentive to have the app installed in their phones and not go to Google to start their search. When I installed HomeAdvisor on my phone and searched "cleaning services" and then did not complete the order, I received emails a few days later from HomeAdvisor offering discount for availing cleaning services. The evolution of the ANGI's fixed price model is perhaps going to be single most important driver for differentiating the company and the stock price itself. ANGI IR talked about how there is a potential of aggregating 6-8 projects that every homeowner does every year and see those projects on a subscription basis. If they can manage to do that and sell these guaranteed jobs to SP later, it can transform to be a much higher margin business.

Currently, ~30-40% of ANGI's service requests come from Google. That's why I said Google is also ANGI's friend. But in one "fine" morning, Google can decide to change its search algorithm that can increase ANGI's cost to reach its customers. As you will see shortly, ANGI is ~95% gross margin business and more than half of its revenue is spent on SG&A. Any sudden and negative change in search algorithm can have an immediate impact on bottom line margins. Therefore, this friendship is also an eternal source of vulnerability which can only be mitigated if ANGI can convince customers to install the app on their phone. For infrequent services such as homeservices, that might not prove to be easy. Having said that, I recently came across an interesting medium piece comparing Booking Holdings and Airbnb. The author showed the below comparison between the two businesses when they are at the similar stage of lifecycle of the business, and made the following point:

For all the bad rap about performance marketing in relation to the "purer" organic and direct marketing, Booking Holdings and other OTAs have operated with this constraint (higher marketing costs) and built finely tuned performance marketing machines and operationally and financially efficient businesses.







Section 4: Valuation model, and what it implies

So far, I have primarily focused on the narrative in this deep dive. The remaining part of this deep dive will discuss the numbers. If you are reading my deep dive for the first time, please read my approach to valuation first, and then come back to this section.

I have taken a rather conservative approach while building the projections which I will discuss later. Despite my conservative assumptions on the fundamentals of the business, I had to assume 16x terminal FCF multiple to generate ~8% IRR. As you can perhaps gauge from the bear arguments, I have fair amount of sympathy towards the risks bears point out. However, ANGI's balance sheet is unleveraged, generates Free Cash Flow, and has very prudent and capable board at the helm who has cut their teeth in navigating the shift from offline to online businesses multiple times in their careers. Even if things don't quite work out, given the secular tailwind, I think there is not a high probability of losing money from here. But if things do work out, it is potentially a mid to high teen IRR opportunity over the long term. If ANGI can scale fixed price model and somewhat insulate itself from Google risk, not only can they post a much better numbers than modeled here, but also the multiple can be higher than assumed. In the event these twin tailwinds materialize over the long term, a significant upside awaits the shareholders.

Items		2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
OCF		256	274	332	399	468	540	574	622	679	732	796
Capex		(65)	(74)	(82)	(86)	(90)	(95)	(103)	(113)	(120)	(116)	(112)
SBC, tax adjusted		(58)	(64)	(70)	(77)	(85)	(95)	(101)	(108)	(116)	(124)	(133)
FCF		**133**	**136**	**180**	**236**	**293**	**351**	**369**	**401**	**443**	**492**	**552**
FCF/share		0.26	0.28	0.38	0.51	0.66	0.83	0.91	1.04	1.22	1.44	1.73
Terminal FCF multiple												**16.0x**
Terminal Stock price												27.7
Current price*	**11.7**											
Dividend/share		-	-	-	-	-	-	-	-	-	-	-
Cash flow	(11.7)	-	-	-	-	-	-	-	-	-	-	27.7
IRR	**8.1%**											
#diluted shares outstanding	515	507	485	471	459	442	423	403	385	364	342	319
Stock price		13	14	15	16	17	19	20	22	24	26	28
Repurchase		(100)	(300)	(200)	(200)	(300)	(350)	(400)	(400)	(500)	(550)	(650)
#shares buyback		7.9	21.9	13.5	12.5	17.3	18.7	19.7	18.3	21.1	21.5	23.5
**Closing price of December 03, 2020*												

Before delving into the fundamental projections, I would like to remind my readers that my sole intention was to figure out the embedded assumptions in the stock price, and not to impose my views on the projections. As always, I encourage you to download the model, and play with the assumptions to fit your narrative.

As explained in section 1, ~80% of ANGI's revenue comes from marketplace. Within marketplace, ANGI segments the revenue into consumer connection revenue, SP subscription revenue, and other revenue.

For consumer connection revenue, I have introduced a new line item within the segment to separate the revenue generated from fixed price model. As you can see below, although service request has been growing around mid to high teen rates, I have slowed it significantly going forward. Because of the pandemic and resultant capacity constraint of SPs, monetization level has significantly dropped in 2020. As things increasingly normalize and the constraints from the SPs gradually ease, I think monetization level will improve over the next several quarters. However, after a step-up of 100 bps next year, I increased the monetization level very gradually by 50 bps each year to reach 55.0% in 2030 which is still ~400 bps below the monetization level in 2019. I have also kept the leads multiple per monetized transaction at 2x although it should increase over time with greater liquidity of SPs on the platform.

When it comes to fixed price contracts, management mentioned they expect this to be half their business over the next 5-7 years. As per the model below, it crosses 50% of the total revenue in 2029. Please note that ANGI has started reporting revenue generated from fixed price model on a gross basis from 2020 which they used to report on a net basis in 2019. If ANGI can create other ancillary services such as payments and financing, it is possible to increase take rates.

Overall, the topline is assumed to grow at low double-digit rate while management has repeatedly mentioned to target 20-25% topline growth for the next few years. Management, however, also indicated that because of Covid-19 and resultant capacity constraints of SPs, it may take a few quarters to get back to 20-25% growth momentum. Basically, the expectation embedded in the topline is largely muted and nowhere close to the lofty growth numbers mentioned by management.

Amount in USD Mn, except %	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	**361**	**499**	**736**	**1,132**	**1,326**	**1,450**	**1,635**	**1,826**	**2,048**	**2,312**	**2,626**	**2,874**	**3,137**	**3,442**	**3,764**	**4,136**
Growth		*38.1%*	*47.6%*	*53.8%*	*17.1%*	*9.3%*	*12.8%*	*11.7%*	*12.2%*	*12.9%*	*13.6%*	*9.5%*	*9.2%*	*9.7%*	*9.3%*	*9.9%*
Segment																
Consumer connection revenue	***293***	***411***	***561***	***755***	***973***	***1,084***	***1,264***	***1,449***	***1,666***	***1,924***	***2,232***	***2,475***	***2,732***	***3,031***	***3,346***	***3,711***
Growth		*40.3%*	*36.8%*	*34.5%*	*28.8%*	*11.3%*	*16.6%*	*14.7%*	*15.0%*	*15.5%*	*16.0%*	*10.9%*	*10.4%*	*10.9%*	*10.4%*	*10.9%*
Revenue per service request	*30*	*31*	*31*	*32*	*36*	*34*	*36*	*38*	*41*	*44*	*49*	*52*	*56*	*60*	*65*	*71*
Revenue per lead					*30*	*30*	*30*	*30*	*30*	*30*	*30*	*30*	*30*	*30*	*30*	*30*
Fixed Price revenue						*168*	*249*	*355*	*498*	*689*	*938*	*1,145*	*1,378*	*1,653*	*1,958*	*2,313*
Growth							*48.0%*	*42.7%*	*40.4%*	*38.3%*	*36.2%*	*22.0%*	*20.4%*	*20.0%*	*18.4%*	*18.1%*
As % of total revenue						*11.6%*	*15.2%*	*19.4%*	*24.3%*	*29.8%*	*35.7%*	*39.8%*	*43.9%*	*48.0%*	*52.0%*	*55.9%*
SP membership subscription revenue	***31***	***52***	***73***	***84***	***79***	***81***	***82***	***84***	***86***	***87***	***89***	***91***	***93***	***95***	***97***	***99***
Per paying member per month		*35.0*	*37.4*	*35.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*	*30.3*
Growth			*7%*	*-6%*	*-14%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Other revenue	***3***	***3***	***4***	***4***	***7***	***8***	***8***	***9***	***10***	***11***	***12***	***14***	***15***	***16***	***18***	***20***
Growth		*-17.4%*	*34.3%*	*3.7%*	*76.9%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*
Total Marketplace Revenue	**327**	**465**	**638**	**843**	**1,059**	**1,172**	**1,355**	**1,542**	**1,762**	**2,023**	**2,334**	**2,579**	**2,840**	**3,142**	**3,461**	**3,829**
Growth		*42.1%*	*37.2%*	*32.1%*	*25.7%*	*10.7%*	*15.6%*	*13.9%*	*14.3%*	*14.8%*	*15.4%*	*10.5%*	*10.1%*	*10.6%*	*10.1%*	*10.6%*
Operating metrics																
Marketplace Service Requests '000	9,831	13,208	18,129	23,488	27,376	32,304	35,534	38,377	41,063	43,527	45,703	47,531	48,957	50,426	51,435	52,463
Growth		*34.4%*	*37.3%*	*29.6%*	*16.6%*	*18.0%*	*10.0%*	*8.0%*	*7.0%*	*6.0%*	*5.0%*	*4.0%*	*3.0%*	*3.0%*	*2.0%*	*2.0%*
Marketplace Monetized Transactions '000				14,068	16,068	16,798	18,833	20,532	22,174	23,722	25,137	26,142	26,927	27,734	28,289	28,855
% of request monetized				*59.9%*	*58.7%*	*52.0%*	*53.0%*	*53.5%*	*54.0%*	*54.5%*	*55.0%*	*55.0%*	*55.0%*	*55.0%*	*55.0%*	*55.0%*
Monetized requests available for leads '000					*16,068*	*15,118*	*16,761*	*18,068*	*19,291*	*20,401*	*21,366*	*21,960*	*22,349*	*22,742*	*22,914*	*23,084*
Leads per monetized request					2.0x	*2.0x*	*2.0x*	*2.0x*	*2.0x*	*2.0x*	*2.0x*	*2.0x*	*2.0x*	*2.0x*	*2.0x*	*2.0x*
Number of leads provided to SP '000					32,136	30,236	33,523	36,136	38,583	40,802	42,733	43,919	44,698	45,484	45,828	46,168
% of leads converts to a job					25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
# of jobs completed '000					8,034	7,559	8,381	9,034	9,646	10,201	10,683	10,980	11,175	11,371	11,457	11,542
Avg value of the project					2,500	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262	3,360
GMV (USD Mn)					20,085	18,898	21,580	23,960	26,350	28,702	30,962	32,776	34,358	36,011	37,372	38,778
Fixed Price contracts						168	249	355	498	689	938	1,145	1,378	1,653	1,958	2,313
Growth							*48.0%*	*42.7%*	*40.4%*	*38.3%*	*36.2%*	*22.0%*	*20.4%*	*20.0%*	*18.4%*	*18.1%*
% of monetized service request						*10.0%*	*11.0%*	*12.0%*	*13.0%*	*14.0%*	*15.0%*	*16.0%*	*17.0%*	*18.0%*	*19.0%*	*20.0%*
Total jobs						1,680	2,072	2,464	2,883	3,321	3,771	4,183	4,578	4,992	5,375	5,771
Avg. value of job						100	120	144	173	207	249	274	301	331	364	401
Fixed Price GMV						168	249	355	498	689	938	1,145	1,378	1,653	1,958	2,313
Total marketplace GMV					20,085	19,066	21,829	24,315	26,849	29,391	31,900	33,921	35,736	37,665	39,330	41,091
Fixed price as % of marketplace GMV						0.9%	1.1%	1.5%	1.9%	2.3%	2.9%	3.4%	3.9%	4.4%	5.0%	5.6%
TAM (USD Mn)					500,000	515,000	530,450	546,364	562,754	579,637	597,026	614,937	633,385	652,387	671,958	692,117
Penetration					*4.0%*	*3.7%*	*4.1%*	*4.5%*	*4.8%*	*5.1%*	*5.3%*	*5.5%*	*5.6%*	*5.8%*	*5.9%*	*5.9%*
Marketplace Paying SPs	102	143	181	214	220	224	229	233	238	243	248	253	258	263	268	274
Growth		*40.2%*	*26.6%*	*18.2%*	*2.8%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*
Advertising & Other revenue	**34**	**34**	**98**	**289**	**267**	**278**	**280**	**283**	**286**	**289**	**292**	**295**	**298**	**301**	**304**	**307**
Ad revenue per SP per month				596	610	622	622	622	622	622	622	622	622	622	622	622
Growth					*2.4%*	*2.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Advertising SP	N/A	N/A	45	36	37	37	38	38	39	39	39	40	40	40	41	41
Growth				*-20.0%*	*2.8%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*

Although historically ANGI has been ~95% gross margin business, as mentioned earlier, it has recently changed its reporting for marketplace's fixed price products from net to gross. The payments they make to SPs are now included in the cost of revenue line item and hence gross margin has declined in 2020 and is expected to decline going forward. This is, of course, just an accounting treatment, and has little fundamental implication in the business although at first glance, one may get scared seeing such precipitous decline of gross margins. ANGI mentioned they have been investing on fixed price model through the income statement by providing discounts to customers. If ANGI can manage to bundle different home services into a subscription model, gross margin can be higher than assumed in the out years.

For SG&A, I anchor incremental return on SG&A spending (changes in revenue/changes in SG&A) at 4.0x for the next 3 years and 5.0x thereafter.

Overall, adjusted EBITDA (EBITDA-SBC) margin is 13.2% in 2022 in my model although management's long-term comp (discussed later) is tied to an implied adjusted EBITDA margin of ~18% *in 2022*. This gulf of difference indicates ANGI does not have to hit it out of the park to generate decent return for shareholders. Even if it does an okay job, it can lead to more than decent return for shareholders.

Amount in USD Mn, except %	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Cost of revenue	(23)	(26)	(34)	(56)	(46)	(164)	(223)	(296)	(395)	(531)	(707)	(853)	(1,018)	(1,211)	(1,425)	(1,674)
SBC	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-
SBC as % of revenue	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cost of revenue, excl. SBC	(23)	(26)	(34)	(56)	(46)	(164)	(223)	(296)	(395)	(531)	(707)	(853)	(1,018)	(1,211)	(1,425)	(1,674)
As % of revenue	6.3%	5.2%	4.6%	4.9%	3.5%	11.3%	13.6%	16.2%	19.3%	23.0%	26.9%	29.7%	32.4%	35.2%	37.9%	40.5%
Costs related to Fixed price as % of revenue						75.0%	73.0%	71.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Costs related to Fixed price						(126)	(181)	(252)	(349)	(482)	(657)	(801)	(965)	(1,157)	(1,371)	(1,619)
Costs related to rest of the business as %	6.3%	5.2%	4.6%	4.9%	3.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Costs related to rest of the business						(38)	(42)	(44)	(47)	(49)	(51)	(52)	(53)	(54)	(54)	(55)
Gross Profit	338	473	702	1,077	1,280	1,285	1,412	1,530	1,653	1,781	1,918	2,021	2,120	2,231	2,339	2,462
Gross Margin	93.7%	94.8%	95.4%	95.1%	96.5%	88.7%	86.4%	83.8%	80.7%	77.0%	73.1%	70.3%	67.6%	64.8%	62.1%	59.5%
Incremental contribution margin		97.9%	96.5%	94.5%	104.8%	4.5%	68.4%	61.7%	55.5%	48.5%	43.7%	41.3%	37.6%	36.6%	33.5%	33.1%
Selling and Marketing (S&M)	(226)	(307)	(464)	(541)	(733)	(765)	(812)	(860)	(905)	(959)	(1,022)	(1,073)	(1,126)	(1,188)	(1,253)	(1,329)
SBC	1	1	26	3	4	4	5	5	6	7	8	9	9	10	11	12
SBC as % of revenue	0.2%	0.2%	3.5%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
S&M, excl. SBC	(225)	(306)	(438)	(538)	(730)	(760)	(807)	(854)	(899)	(952)	(1,014)	(1,064)	(1,117)	(1,178)	(1,242)	(1,316)
As % of revenue	62.4%	61.3%	59.5%	47.5%	55.0%	52.5%	49.3%	46.8%	43.9%	41.2%	38.6%	37.0%	35.6%	34.2%	33.0%	31.8%
Incremental return on marketing		1.7x	1.8x	4.0x	1.0x	4.0x	4.0x	4.0x	5.0x	5.0x	5.0x	5.0x	5.0x	5.0x	5.0x	5.0x
Product Development	(17)	(21)	(48)	(61)	(64)	(70)	(75)	(80)	(86)	(92)	(100)	(103)	(113)	(120)	(128)	(136)
SBC	1	1	16	10	8	9	10	11	12	14	16	17	19	21	23	25
SBC as % of revenue	0.3%	0.3%	2.1%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
R&D, excl. SBC	(16)	(19)	(32)	(51)	(56)	(61)	(65)	(69)	(74)	(79)	(84)	(86)	(94)	(100)	(105)	(112)
As % of revenue	4.3%	3.9%	4.4%	4.5%	4.2%	4.2%	4.0%	3.8%	3.6%	3.4%	3.2%	3.0%	3.0%	2.9%	2.8%	2.7%
General & Administrative (G&A)	(87)	(110)	(300)	(323)	(348)	(379)	(410)	(437)	(468)	(503)	(542)	(562)	(579)	(598)	(612)	(627)
SBC	6	7	108	84	56	60	66	72	79	87	96	102	108	116	123	131
SBC as % of revenue	1.7%	1.4%	14.6%	7.4%	4.3%	4.2%	4.1%	4.0%	3.9%	3.8%	3.7%	3.6%	3.5%	3.4%	3.3%	3.2%
G&A, excl. SBC	(81)	(103)	(193)	(239)	(292)	(319)	(343)	(365)	(389)	(416)	(446)	(460)	(471)	(482)	(489)	(496)
As % of revenue	22.3%	20.7%	26.2%	21.1%	22.0%	22.0%	21.0%	20.0%	19.0%	18.0%	17.0%	16.0%	15.0%	14.0%	13.0%	12.0%
Depreciation	(7)	(8)	(15)	(24)	(40)	(43)	(49)	(55)	(61)	(69)	(79)	(86)	(94)	(100)	(105)	(112)
As % of revenue	1.8%	1.7%	2.0%	2.1%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	2.9%	2.8%	2.7%
Amortization	(4)	(3)	(23)	(62)	(55)	(42)	(15)	(14)	(8)	(1)	-	-	-	-	-	-
As % of revenue	1.1%	0.6%	3.2%	5.5%	4.2%	2.9%	0.9%	0.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Operating expenses	(363)	(475)	(884)	(1,068)	(1,288)	(1,464)	(1,584)	(1,742)	(1,924)	(2,155)	(2,451)	(2,678)	(2,930)	(3,217)	(3,524)	(3,877)
EBIT	(2)	24	(148)	64	39	(14)	51	83	124	157	175	196	207	226	241	258
EBIT Margin	-0.4%	4.8%	-20.1%	5.6%	2.9%	-1.0%	3.1%	4.6%	6.1%	6.8%	6.7%	6.8%	6.6%	6.6%	6.4%	6.2%
Adjusted EBITDA	17	45	39	248	202	145	196	241	291	335	374	411	438	472	503	538
Adjusted EBITDA Margin	4.6%	8.9%	5.3%	21.9%	15.3%	10.0%	12.0%	13.2%	14.2%	14.5%	14.2%	14.3%	14.0%	13.7%	13.3%	13.0%

Section 5: Management incentives

In March 2020, ANGI's CEO Brandon Ridenour and Chief Product Officer Oisin Hanrahan were granted 1.1 mn and ~739K Performance Stock Units (PSUs) subjected to conditions: "Market Price Test", and "Results Test". The PSUs will be vested subjected to the below conditions mentioned in the table. It's the "Results Test" that really caught my attention. If you see the model, I projected ANGI's revenues of ~$2.1 Bn in 2023 and ~$2.6 Bn in 2025 whereas management's *revenue performance target for North America business in 2022 is $2.1-$2.6 Bn*. If they manage to hit the midpoint for the whole company in 2022, they will be two years earlier than was assumed in the model. My adjusted EBITDA numbers are even more conservative. *If they manage to hit the mid-point of 2022 numbers, ANGI will be almost four years earlier than assumed in the model.*

Stock price ($)	PSUs
<6.77	0%
6.77	50%
9.01	100%
11.24	150%
13.54	200%

Metric (North America)	Result (2022E)	PSUs
Revenue	$2.1-2.6 Bn	75-200%
Adjusted EBITDA	$365-490 Mn	

<u>*My big takeaway is that the bar is really, really low for ANGI*</u>.

While I have not highlighted IAC much on this deep dive since I really wanted to focus only on ANGI, let's not forget 84.8% of ANGI is owned by IAC, and ANGI contributes almost one-third of IAC's current market cap. Given the low float of the stock, it tends to be very volatile in both directions.

IAC's ownership is certainly a positive for ANGI shareholders. IAC has been dealing with "underdog" assets in the age of internet for more than two decades, and their track record speaks for itself. The concerns and challenges related to ANGI are hardly new under the sun. IAC's anti-conglomerate mentality, along with strong desire to make management incentives tied to things that matter, is a source of comfort for ANGI shareholders. A 2019 Forbes piece on Barry Diller, IAC's founder, mentioned,

> *"At IAC he has built and spun off ten publicly traded companies including Ticketmaster, travel giant Expedia and Match Group, Tinder's parent company, worth a combined $70 billion (at an estimated cost of $12 billion)…Since he took control of IAC's predecessor in 1995, he's produced 14% compound annual returns for shareholders, outperforming Berkshire Hathaway and trouncing both the S&P and Hollywood giants like Disney, CBS and Viacom…To understand Diller, it's important to realize that he relishes being an underdog. When it comes to acquisitions, he tends to buy misfits that others dismiss."*

Based on Mr. Diller's and IAC's records, I think ANGI shareholders are in good company, and considering the extremely muted expectation embedded in the current stock price, I think it's very much worth taking a shot.

Section 6: Final words

It is really not binary in terms of whether a company is good or bad, or whether a company has competitive advantage or not. ANGI most certainly does not enjoy as much moat as an Amazon does, and there is indeed some lack of clarity in terms of how the competitive dynamic may evolve going forward, especially if fixed price model proves more difficult than assumed to make it work. Perhaps that's why the opportunity in the stock may exist in the first place. If a company is "great" but stock price reflects "incredibly great" expectations, there might be no opportunity there!

I also want to give more context to my portfolio weights by sharing my whole portfolio to the subscribers. Given I already have ~11% weight to IAC, my recent purchase (last week of November) of ANGI took that into account. Although ANGI has ~5% weight, my portfolio essentially has ~8-9% economic exposure to ANGI given one-third of IAC's value is explained by ANGI.

I believe if fixed price model works really well for ANGI, it is potentially a mid to high teen IRR investment over the long term.

Ticker	Weight	Avg. Cost
BRK.B	22.8%	189.5
ETSY	19.8%	114.6
FB	12.5%	182.1
IAC	11.1%	124.2
MA	5.1%	253.9
ISRG	5.0%	558.6
ANGI	5.0%	11.7
GOOG	4.9%	1,184.6
AMZN	4.4%	1,849.2
DLTR	4.4%	72.7
WLTW	4.3%	176.8
Cash	0.8%	
Total	100%	

Thank you for reading. I truly appreciate your support.

If you are monthly subscriber, please consider switching to an annual subscription. ***My annual subscribers will get an opportunity to participate in a poll to choose 11 stocks that I will cover in 2021. I will share a list of ~40 stocks with you, and my annual subscribers will choose 11 stocks from that list which I will cover in 2021. For the month of January 2021, I am going to cover Ansys (ANSS).***

If someone sent you this deep dive, please consider subscribing to MBI Deep Dives.

Recommended readings

1. Andrew Walker (bullish): $ANGI: odds and ends

2. Boyar Value Podcast with ANGI CEO: Brandon Ridenour

3. Ben Thompson: Playing on Hard Mode

4. Forbes piece on Barry Diller

5. Airbnb vs Booking comparison

6. Sameer Sing on marketplace defensibility and scalability