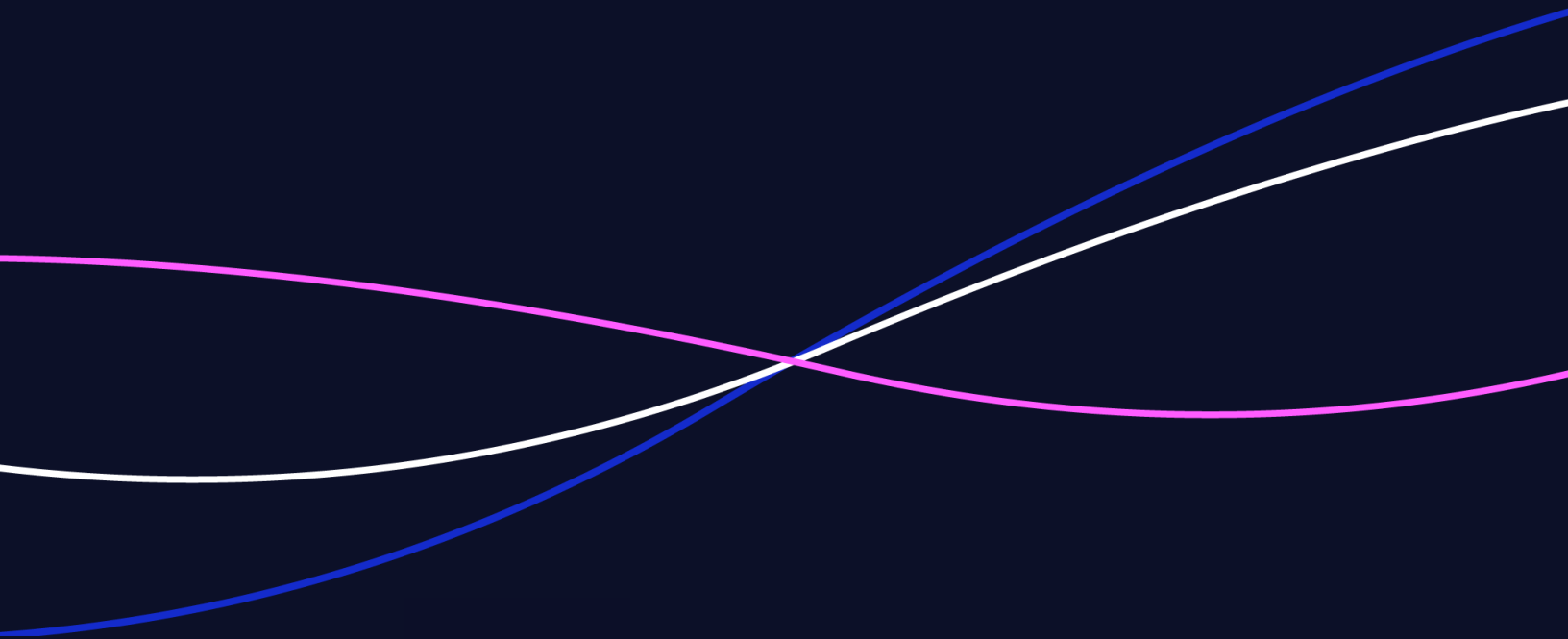


Inside Compass: A Strategic Analysis



2019



Inside Compass

Part 1: Growth Strategies

Part 2: Brokerage or Tech Company?

Part 3: Valuation

Part 4: Sustainability

Part 5: Endgame

About the Author



Mike is a global real estate tech strategist, and a scholar-in-residence at the University of Colorado Boulder. He's a former tech entrepreneur, CEO, strategy director, and head of corporate development with broad expertise in online real estate tech, and a passion for growing new businesses.

Mike is internationally recognized as an expert and thought-leader in real estate tech. His evidence-based analysis is widely read by global leaders, and he is a sought-after strategy and new ventures consultant.

Find more at: www.mikedp.com

Part 1: Growth Strategies

Compass is one of the world's proptech unicorns. With a valuation of \$4.4 billion and over \$1.1 billion in venture capital raised, this self-styled technology-enabled broker is now the third largest U.S. brokerage by sales volume.

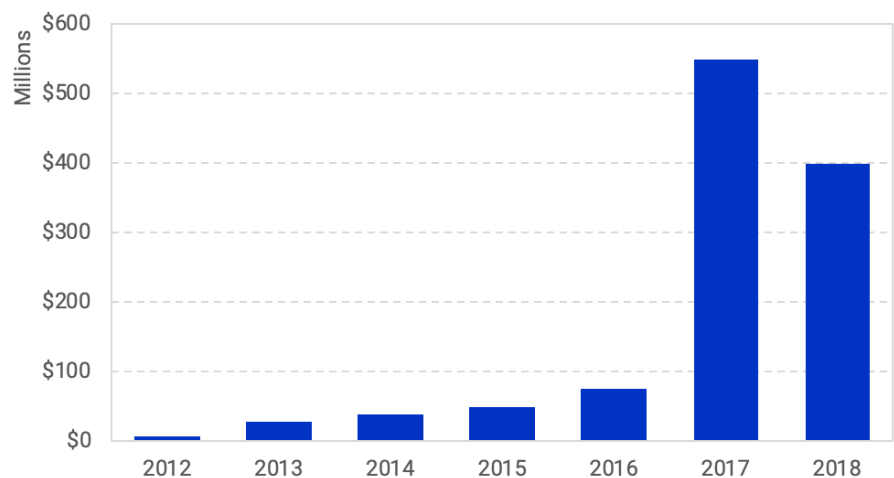
But how has it grown so quickly? What's the secret to its meteoric rise, and what is it that investors see that justifies its massive valuation? This multi-part deep dive into Compass looks to provide evidence-based answers to those questions — and more.

Fundraising and growth drivers

Compass' fundraising prowess sets it apart from its peers. It is one of the select few real estate tech companies that has raised over \$1 billion in equity (Opendoor is another), and counts SoftBank as one of its investors.

Compass raised its first capital in 2012, but it was not until recently that it started raising mega rounds: \$550 million in 2017 and a further \$400 million in 2018.

Capital Raised



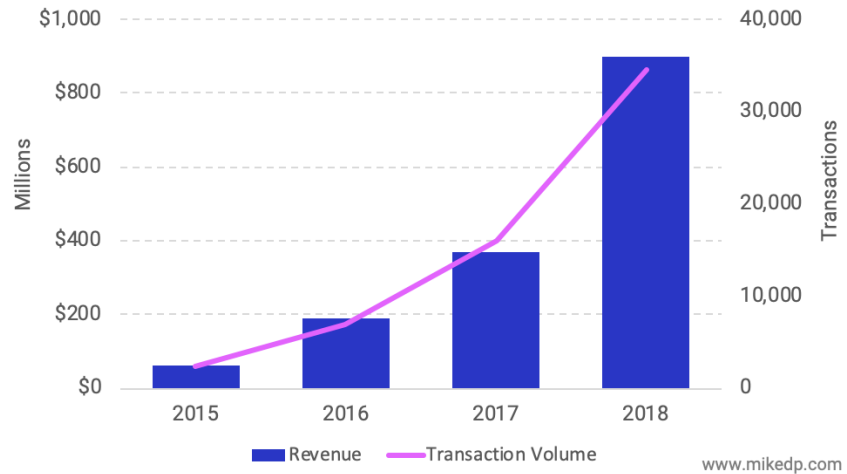
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Compass is one of a select few real estate tech companies that has raised over \$1 billion in equity.

Compass has seen a corresponding increase in its revenue and transaction volumes. Revenue has consistently doubled over the past several years as the company has become the third largest U.S. brokerage in terms of sales volume. It completed around 35,000 transactions worth \$45 billion in 2018.

Compass' competitive advantage in the market is access to capital.

Revenue and Volume Growth



Source: Author's Estimates from numerous company statements.

In a relatively static world of real estate market share, Compass is clearly making an impact and seeing strong growth. And its growth strategy is as unique as its fundraising ability.

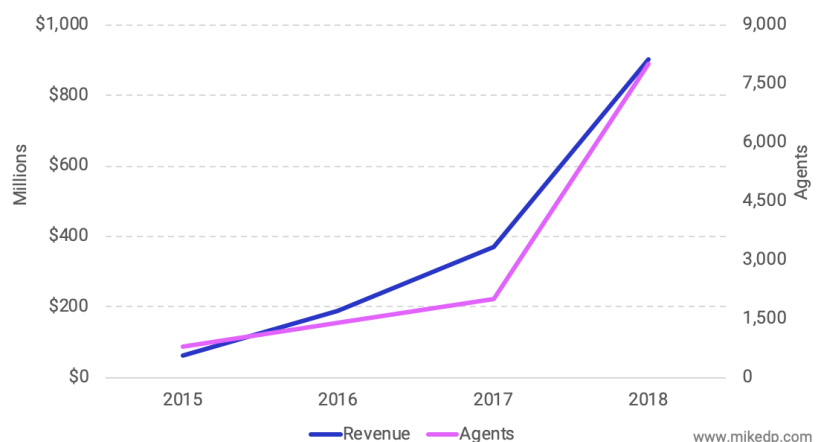
A New York Yankees growth strategy

Beginning in a big way in 2016 — after a \$75 million cash infusion — Compass began a new strategy of growth through acquisition.

Over the years, several sports franchises around the world, including the New York Yankees, Real Madrid, and Chelsea Football Club, have executed a particular growth strategy based on their competitive advantage: access to capital. All three clubs are rich, have access to massive amounts of capital, and use it to buy the best players in the world.

Compass operates a similar strategy; its competitive advantage in the market is capital (over \$1.1 billion of it). The Compass strategy is to deploy that capital by luring the top agents and brokers to its team. Like all real estate brokerages, agent count is the primary driver of revenue.

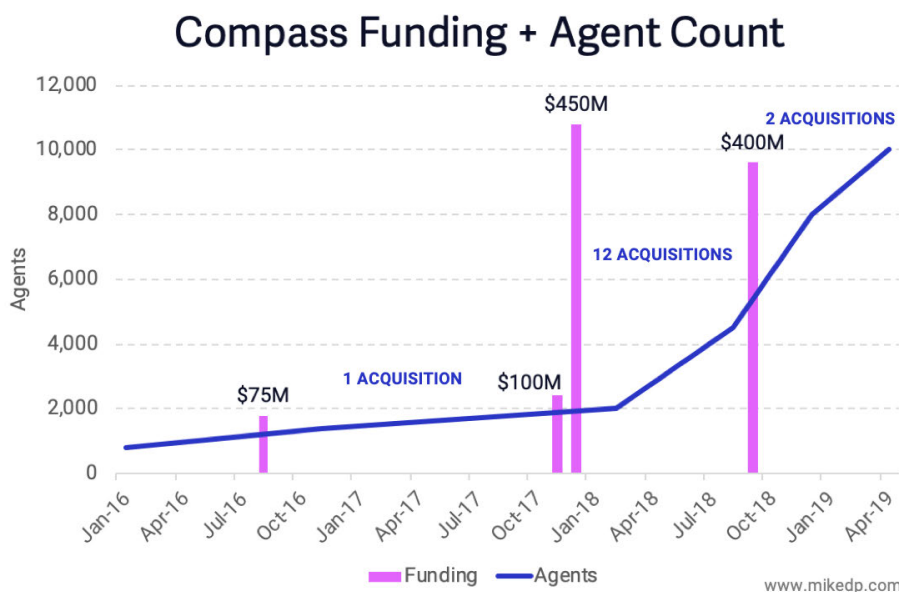
Compass Revenue + Agent Count



Compass employs a number of methods to attract the best talent: high commission splits, bonuses, marketing funds, and stock options. These financial factors are in addition to the softer benefits of the Compass brand, which is slick, modern, exclusive, luxury-focused, and comes with the promise of marketing and technology support (this is explored further in Part Two: Brokerage or Technology Company).

Beginning in 2018, immediately after its massive \$550 million cash infusion, Compass upped the game by acquiring brokerages wholesale. Instead of luring away only the star players, management decided it would be faster to simply acquire entire brokerages, which significantly accelerated the growth of Compass' agent count (note the blue line in the graph below).

Beginning in 2018, immediately after its massive \$550 million cash infusion, Compass upped the game by acquiring brokerages wholesale.



Since the start of 2018, Compass' agent count has increased from roughly 2,000 to 10,000. Of those 8,000 new agents, around 4,200, or 52 percent, came from acquired brokerages. The remainder can be assumed to come from traditional, organic methods (recruitment of star agents and teams).

Assuming a total of \$230 million spent to acquire fourteen brokerages with 4,200 agents, that's a cost of \$55,000 per agent.

Compass' Brokerage Acquisitions: 2018–2019

	Purchase Date	Agent Count
The Collective	January 2018	13
Bushari	January 2018	45
Platinum Drive Realty	February 2018	100
P.S. Platinum	February 2018	40
Conlon Real Estate	April 2018	200
Northwest Group Real Estate	April 2018	25
The Hudson Company	June 2018	24
ICS Realty	June 2018	20
Paragon Real Estate Group	July 2018	236
Pacific Union	August 2018	1700
Avenue Properties	August 2018	110
Wydler Brothers Real Estate	November 2018	50
Alain Pinel Realtors	March 2019	1300
Stribling & Associates	April 2019	304

Steve Murray from [REAL Trends](#), whose firm closely tracks and values U.S. brokerages, estimates that the acquisitions listed above cost Compass a total of between \$220 and \$240 million, paid in a combination of cash and stock. Compass has stated that it typically pays between four and six times a firm's annual pre-tax earnings.

Assuming a total of \$230 million spent to acquire fourteen brokerages with 4,200 agents, that's a cost of \$55,000 per agent. Quite an expensive – and effective – recruitment method.

Marketshare merry-go-round

The real estate world revolves around agents. Agents generate revenue, and that revenue gets split between agent and broker. Each year, many agents change brokerages in an effort to increase their earnings through incentives like more favorable commission splits. It's a recruiting tool.

This marketshare merry-go-round has been going for decades. There's always a new player entering the market with a sweet deal to attract agents with the promise of earning more money. Today, that's Compass and eXp Realty. But what about tomorrow? What's to stop the next wave of players offering an even better financial proposition to lure agents to its ecosystem?

Compass has achieved a tremendous amount of growth in a relatively short period of time, and its competitive advantage is access to capital. It is parlaying that advantage

into a massive agent recruiting tool at scale. But that advantage may not be sustainable nor unique; it's possible for others to copy. Nothing is stopping a new or existing player from offering even more lucrative deals to attract agents.

Brokerage or technology company?

The vision, promise, and lure of Compass is that it's a technology company, not a traditional real estate brokerage. And as a technology company, it will deploy tools unmatched by others in the industry. This potential competitive advantage will be key to attracting and retaining agents, and a cornerstone of the Compass strategy.

Using extensive data as evidence, part two of this series explores that singular, key question upon which this \$4.4 billion company revolves: Is Compass a brokerage, or a technology company?

Part 2: Brokerage or Tech Company?

The first part of this series took a detailed look at Compass' growth strategies, fueled by over \$1.1 billion in venture capital. The company often refers to itself as a tech company and a tech-enabled brokerage, which is part of the lure of the Compass vision — and the underpinning of its massive \$4.4 billion valuation. Now we turn to that fundamental question: Is Compass a tech company, or a traditional brokerage?

Ingredients of a tech company

A real estate technology company that operates as a brokerage (representing buyers and sellers in a real estate transaction) is nothing new. There are tech-enabled brokers around the world: Redfin, Purplebricks, Duproprio, and dozens of smaller players. The defining characteristic of these companies is how technology provides an efficient platform to scale — at rates much faster and at lower cost than traditional brokerages.

A real estate technology company should have the following three attributes:

- **Tech staff:** A technology company should employ technologists.
- **Efficiency:** By leveraging technology, operational efficiency should be higher than the industry average.
- **Scalability:** Technology should enable the business to scale in a non-linear manner.

This analysis focuses on these key attributes and compares Compass to its industry peers, both technology companies like Zillow and Redfin, and traditional brokerages like NRT (Realogy) and HomeServices of America.

Tech staff

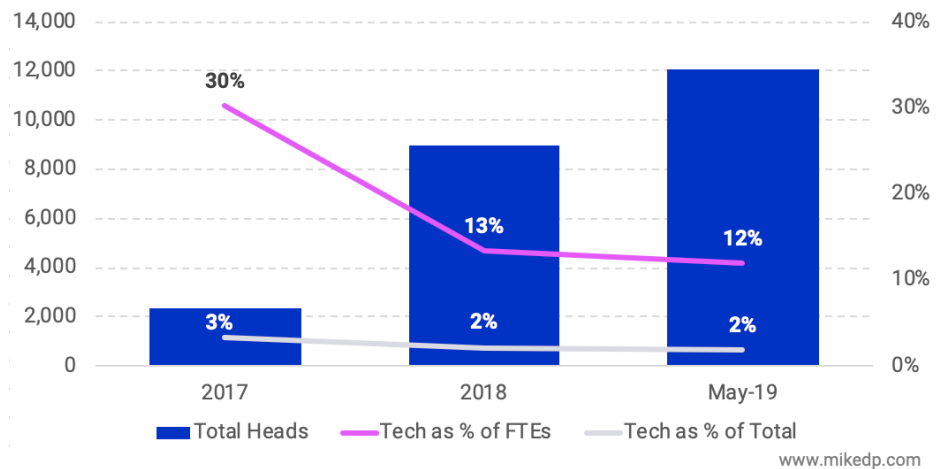
The first clue that a company may be a technology company is the number of software engineers it employs, both in absolute numbers and as a percentage of its total headcount.

Readers that follow my work may recall a [previous analysis](#) where I benchmarked the percentage of tech staff at various real estate companies. At the time, I observed that the most successful technology-enabled brokerages around the world (Redfin, Purplebricks, and Duproprio) had around 10 percent technical staff. The point was that the business of buying and selling houses is still very much a people business, even for leading tech companies.

Compass is clearly staffing up and aggressively building a tech team. Compared to total headcount, including agents, the percentage of tech staff is still quite low (reflecting the central role of agents). However, Compass' tech team represents a significant portion of its salaried, full-time employees.

The defining characteristic of these companies is how technology provides an efficient platform to scale.

Compass Tech Staff

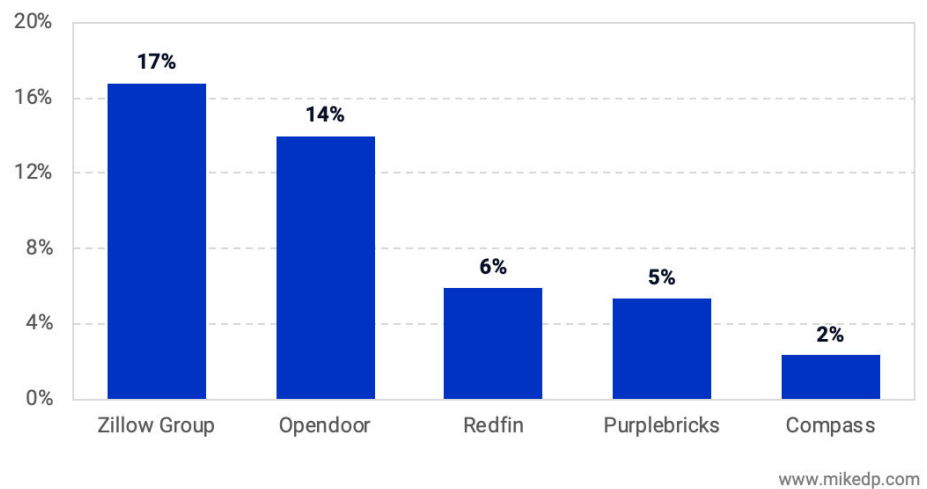


Source: Compass public statements

Many real estate technology companies, including Zillow, Redfin, and Purplebricks, don't publicly disclose the size of their tech teams. This is where LinkedIn comes in handy. While its employee data is not an absolute representation of the truth, it does provide a helpful comparison between companies.

Looking at software engineering staff as a percentage of the total shows a comparison between companies. (Note: software engineers are just one part of a successful tech team.)

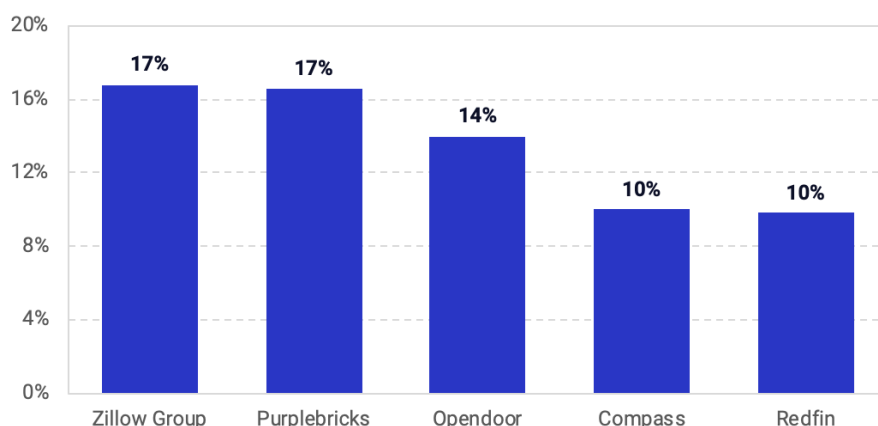
Engineering as % of Total



Source: LinkedIn, May 2019

Backing out agents (independent contractors or otherwise) from the same calculation shows another way to look at the same data. Remember, this is just software engineers, and not the entire product team.

Engineering as % of Total (ex agents)

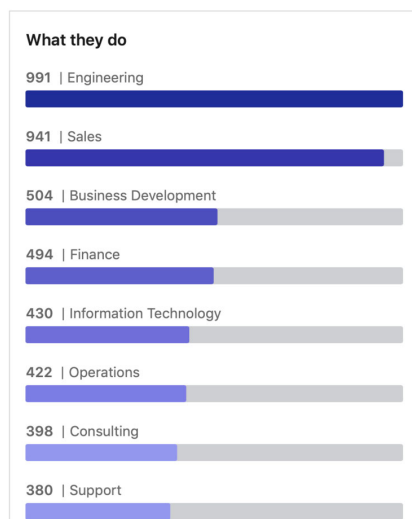


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Source: LinkedIn, May 2019, plus author's estimates

LinkedIn also shows the largest employee categories for each company. The top category for Zillow, which among its peer group is undoubtedly the most tech of the tech companies, is engineering. The same engineering category is ranked #4 for Opendoor, #6 for Redfin, and doesn't appear until #11 for Compass.

Zillow



Compass



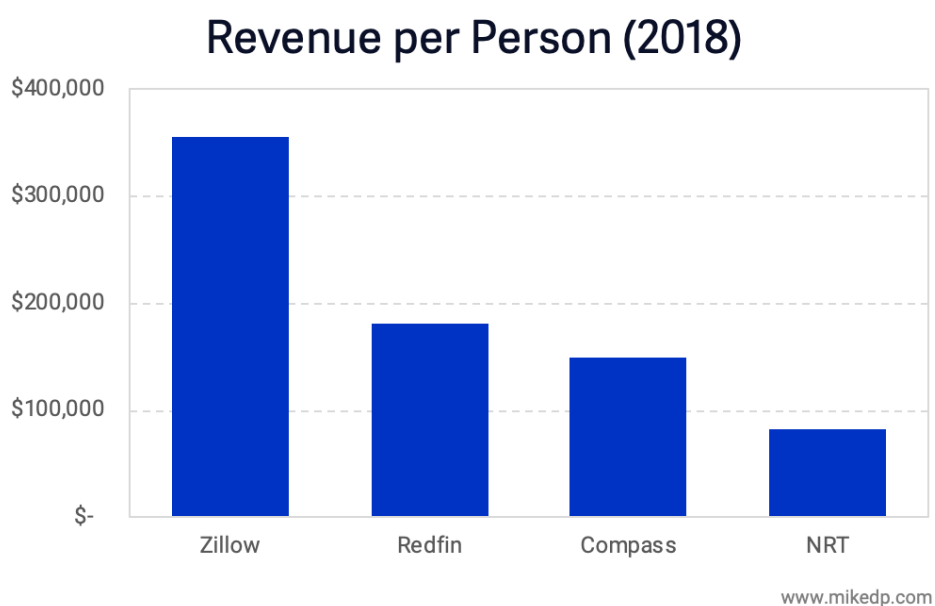
Raw numbers help paint a complete picture. During a [Bloomberg interview](#) in April 2019, Compass stated that it currently employs 200 engineering staffers and wants to have 400 by the end of the year. At the time of its IPO in 2017, Redfin had “[more than 200 engineers and product managers](#)” (or 9 percent of its staff), and today has [nearly 200 engineers](#). And according to LinkedIn, Zillow has an engineering team approaching 1,000.

On the one hand, Compass is clearly outgunned by tech powerhouses like Zillow and Opendoor, but on the other hand it's backing up its claims by aggressively hiring a sizable engineering team.

Efficiency

A classic measure of business model efficiency is revenue per person. More efficient and lucrative business models — typically technology companies — are able to generate higher revenues with a smaller staff.

The chart below looks at revenue per person (including agents, which are the drivers of revenue) during 2018. Since Zillow, Redfin, and Compass each grew their headcount rapidly during the year (from 2,600 to 9,500 at Compass), I've used a midpoint headcount number to reflect a more accurate representation (6,050 for Compass).



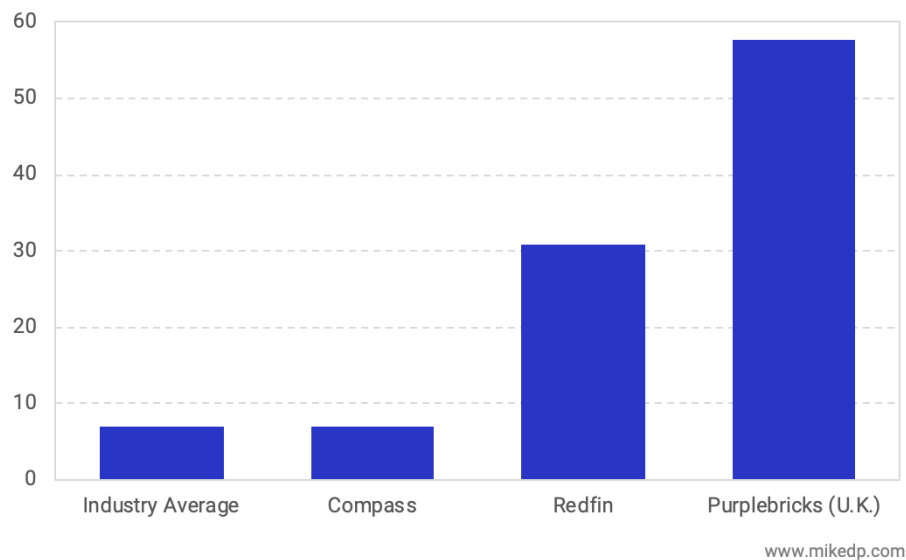
It's worth noting that Compass' target market is the luxury space, with an average home price well over \$1 million. Given that a brokerage derives its revenues as a percentage of the sale price, overall revenues will correlate closely with average sale price. The average sale price of a Compass home is about double that of Redfin, yet Redfin still generates more revenue per person than Compass.

Organizational efficiency can be measured by looking at the average number of transactions an agent is able to close each year, called "production." One would expect a technology company, or a technology-enabled brokerage, to provide its agents greater efficiency through the smart application of technology. Those efficiency gains should translate to the ability to work on and close more transactions.

The chart below compares the average agent production for Compass, Redfin, Purplebricks in the U.K, and the industry average in the U.S.

Exponential efficiency gains come from technology combined with a novel operating model.

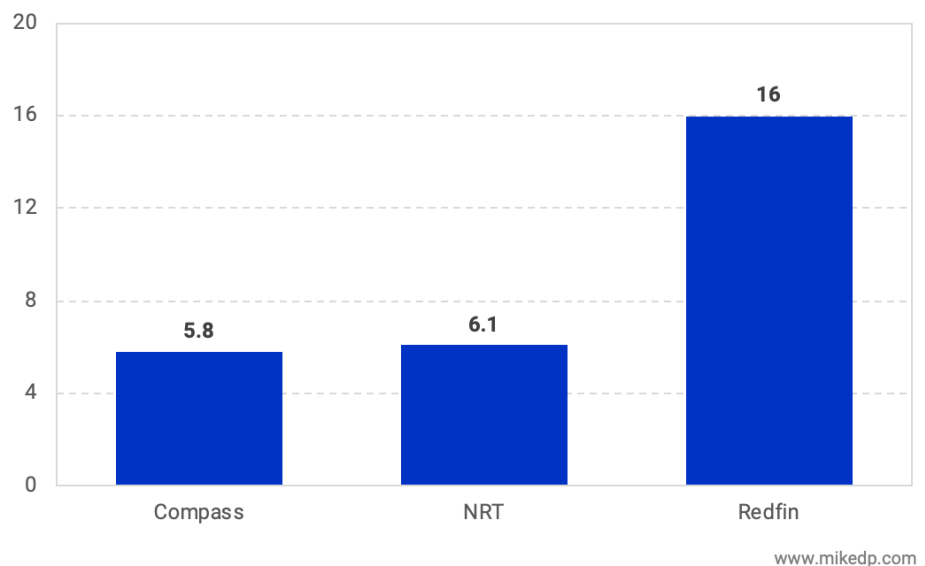
Transactions per Agent (2018)



For this calculation I've again used the 2018 midpoint agent count for Compass, raising its average from four to seven transactions per agent, identical to the overall industry average. Redfin's agents, on the other hand, are 4.5 times more efficient than the industry average — an exponential efficiency gain resulting from technology combined with a novel operating model.

Another way to look at efficiency is not by total agent count, but by total headcount. This method considers the entire organization that, directly and indirectly, supports agents in closing transactions.

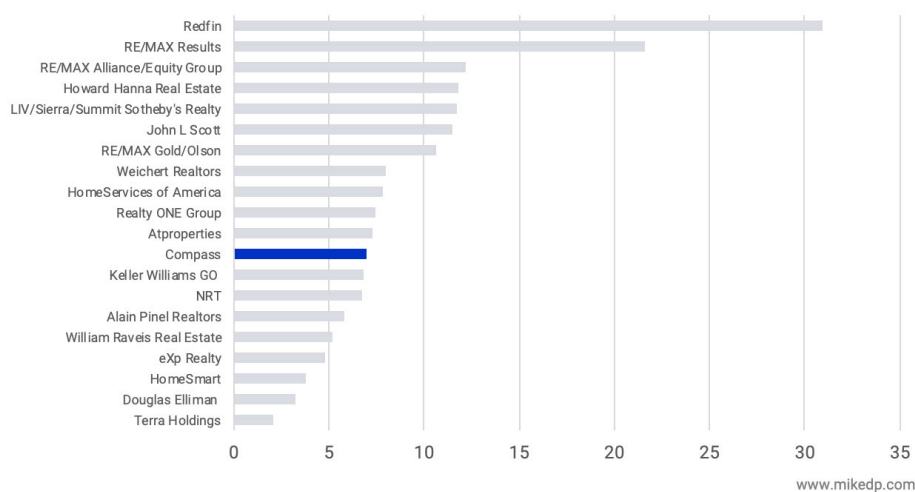
Transactions per Person (2018)



Two interesting things happen in this analysis. First, Compass drops slightly below the industry average (represented by NRT). Second, Redfin's efficiency lead drops to 2.5 times the industry average, a reflection of how important its non-agent support staff is to its overall model.

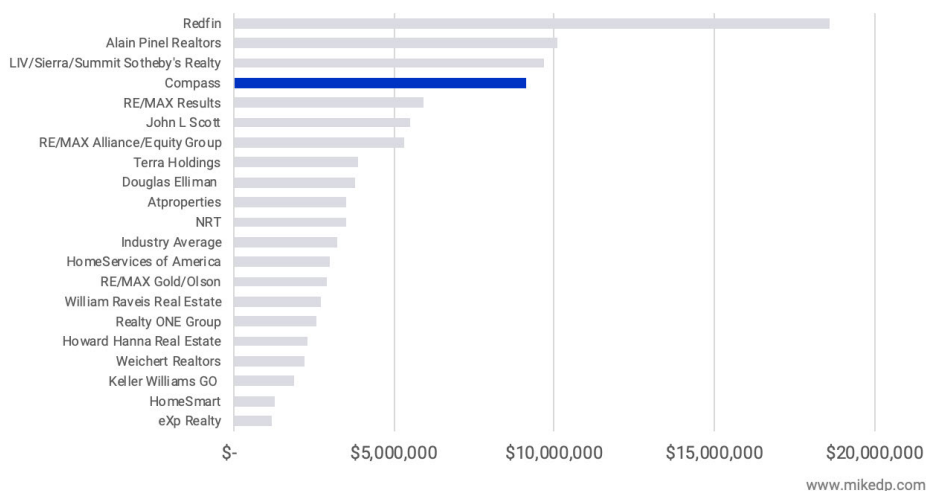
Looking at agent efficiency of the top 20 U.S. brokerages shows Compass right in the middle of the pack (which, incidentally, is led by Redfin). Yes, Compass is more efficient than some brokers, but its agents are considerably less efficient than a number of others, many of which don't even style themselves as "tech-enabled brokerages." Even agents at traditional industry stalwart HomeServices of America are more efficient.

Top 20: Transactions per Agent (2018)



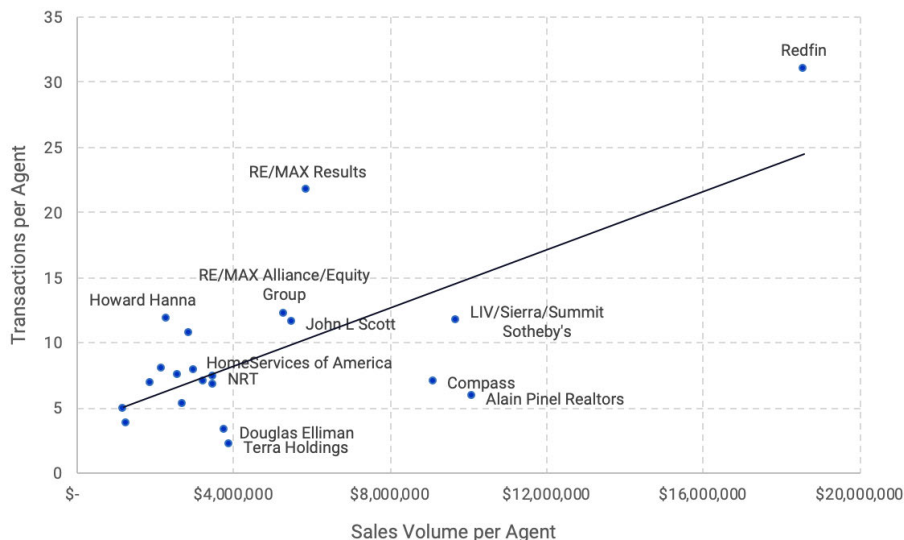
Overall sales volume (the total value of houses sold) per agent shows another angle. Not all houses are created equal, and by being in the luxury space (average home value of \$1.3 million), Compass is near the top of the pack when it comes to agent sales volumes. Its agents can sell less homes and still make a considerable amount of money.

Top 20: Sales Volume per Agent (2018)



Combining both average transactions closed and sales volume per agent shows a more holistic view of agent efficiency. Redfin, the clear outlier, operates a model that is exponentially more efficient than the industry average. Compass is clustered with other luxury brands due to its high average sales price.

Agent Efficiency



Compass agents are no more efficient than the industry average — by a number of different factors.

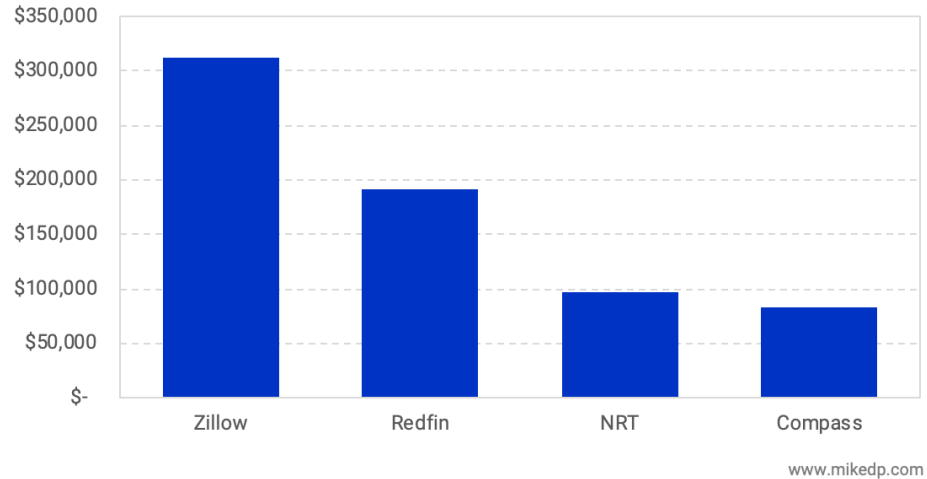
When evaluating Compass, the evidence shows a business whose agents are no more efficient than the industry average — by a number of different factors. Overall business model efficiency, as evidenced by revenue per person, is singularly driven by being in the luxury market where home prices are high. Technology and product development efforts in 2019 and beyond may deliver on efficiency promises, but for the time being it remains simply that — a promise.

Scalability

Technology businesses should scale non-linearly. They should be able to grow revenues faster than expenses, and leverage technology to become more efficient over time — especially when compared to traditional peers.

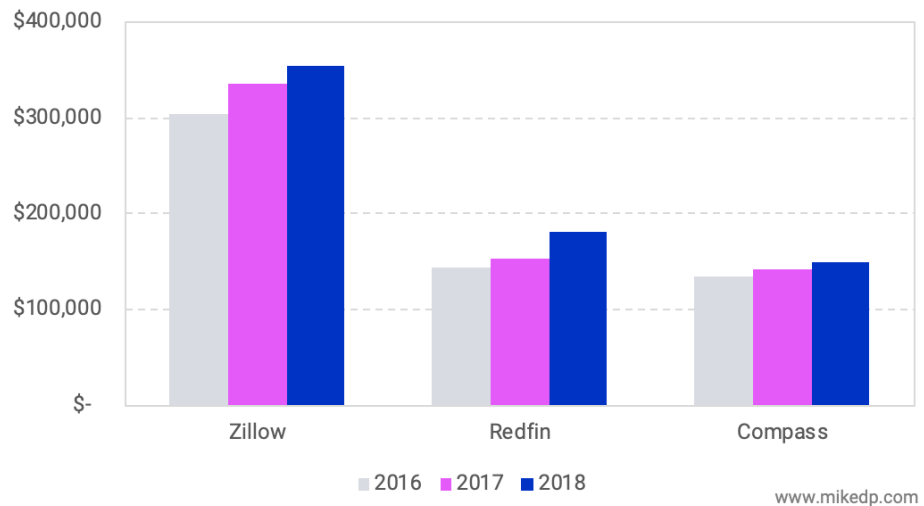
Between 2016 and 2018, each of the following businesses grew revenue and added headcount, but all at different rates. Each new hire at Zillow corresponded to around \$300k of additional revenue, compared to around \$80k for each new person at Compass (slightly below the traditional industry average, as represented by NRT).

New Revenue per New Person (2016-18)



Measuring revenue per person over time gives another sense of business scalability. One would expect a scalable technology business to see efficiency improve over time. The chart below shows the changing revenue per person — including agents — over the span of three years, again using a midpoint count in 2018 due to the rapid headcount growth in all three businesses.

Revenue per Person



Compass is scaling differently, and less efficiently, than its peers.

The evidence shows a clear trend: each business is generating revenue more efficiently as it scales. That trend is more pronounced at Zillow and Redfin, and is the hallmark of a scalable business model.

Compass is scaling differently, and less efficiently, than its peers. This does not mean that Compass is any better or worse than Zillow or Redfin — there are a variety of business models, each with their own merits — just that it is a different type of business.

The valuation quandary

Is Compass worth \$4.4 billion? Should Compass be valued as a traditional brokerage, or a technology company?

The disruptive companies leading the pack in real estate — Zillow, Redfin, Opendoor, and Purplebricks — all combine technology with a novel operating model different than a traditional brokerage. It is this combination that leads to exponential gains in efficiency.

Regardless of whether or not Compass is a technology company, it unquestionably needs to be a technology company — both to support its massive valuation of \$4.4 billion, and to be a lasting, sustainable business. This topic is explored further in Part Three: Valuation.

Part 3: Valuation

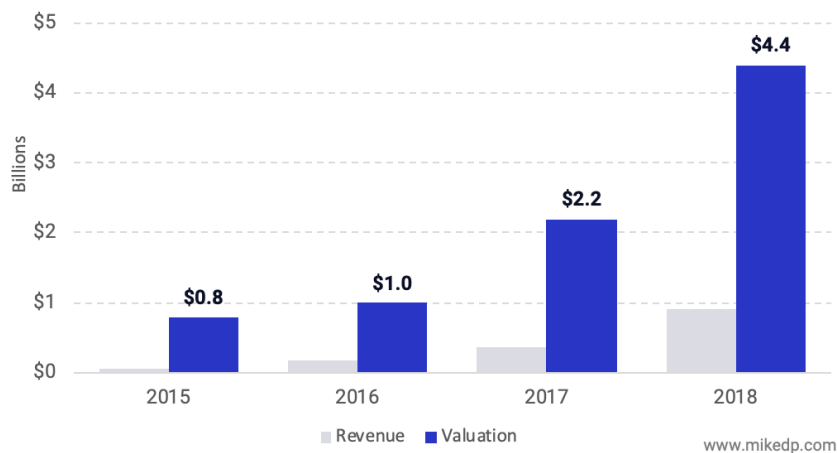
Part One of this series took a detailed look at Compass' growth strategies, while Part Two examined if Compass is a tech company, or a traditional brokerage. Irrespective of the answer, Compass unquestionably needs to be a technology company – both to support its massive valuation, and to be a sustainable business. Is Compass worth \$4.4 billion, and is it being valued as a traditional brokerage, or a technology company?

Valuation overview

Compass has raised over \$1.1 billion in venture capital, starting with \$8 million back in 2012. Its latest \$400 million round in September 2018 valued the company at \$4.4 billion, up from \$2.2 billion in December of 2017. Compass' rising valuation is matched by its impressively growing revenue.

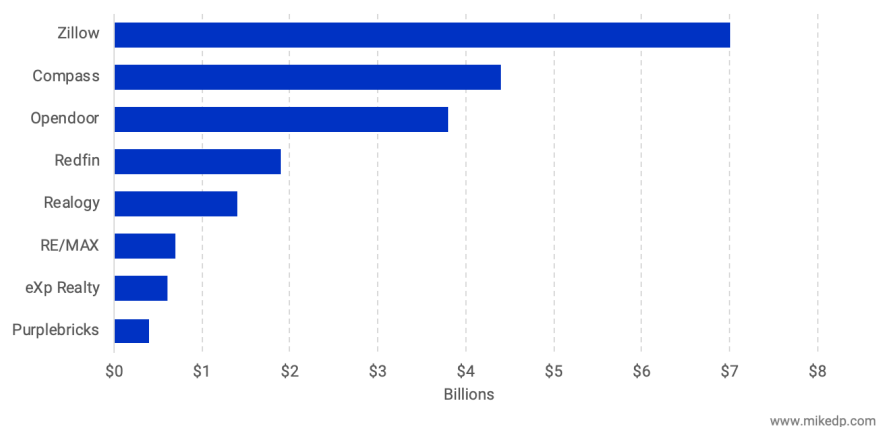
Compass unquestionably needs to be a technology company – both to support its massive valuation, and to be a sustainable business.

Compass Valuation



Compass' peers in the real estate technology space, both public and private, feature an exciting range of valuations. In general, technology companies like Zillow, Redfin, and Opendoor have higher valuations, while traditional brokerages like Realogy and RE/MAX have lower valuations. Investors clearly favor technology companies.

Company Valuations



Source: Public markets, April 2019. Private companies at time of last funding round.

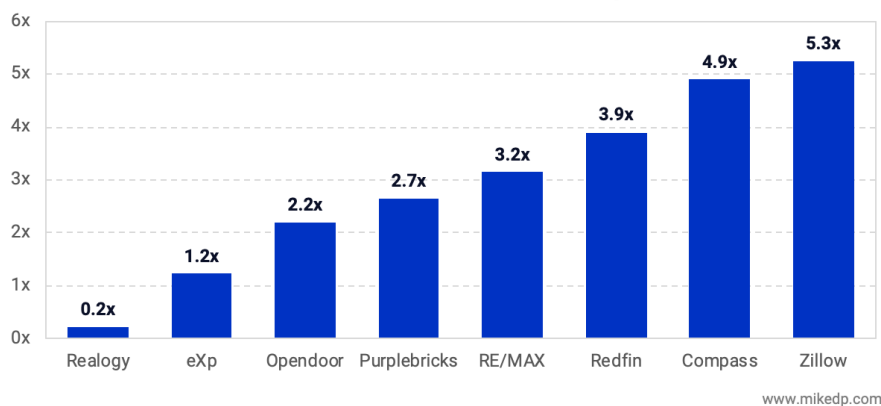
(Both Realogy and Purplebricks have recently released news and earnings results that resulted in a significant drop in valuation. I've used numbers from April in an effort to provide a more fair, "moving average" valuation.)

Revenue multiples

One way to determine a company's value is by using a revenue multiple. That multiple – say 1x or 2x – is multiplied by current revenues to establish a valuation. The higher the multiple, the more optimistic investors are about future growth prospects, and the more that company is worth.

Compass sports a relatively high revenue multiple – rivaled only by tech company Zillow. While its business model is most similar to peers like Redfin, RE/MAX, eXp Realty and Realogy, investors are significantly more optimistic about Compass' future prospects.

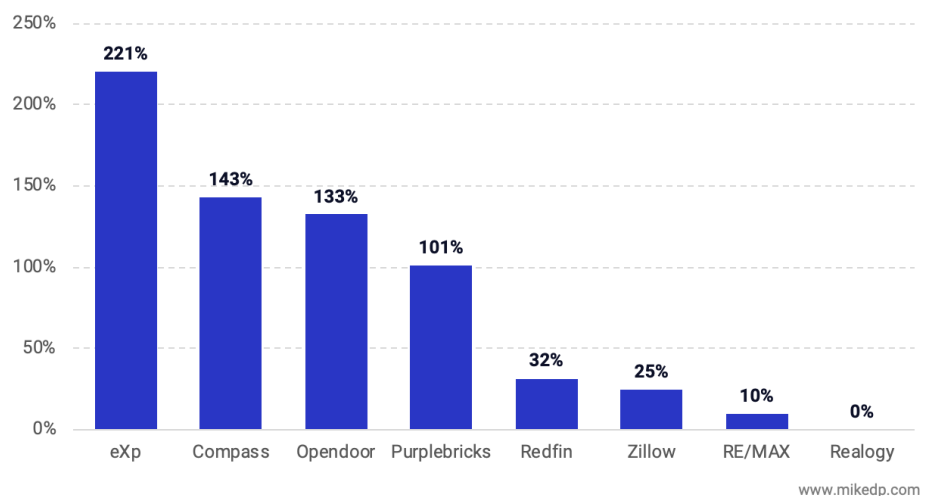
Valuation: Revenue Multiple



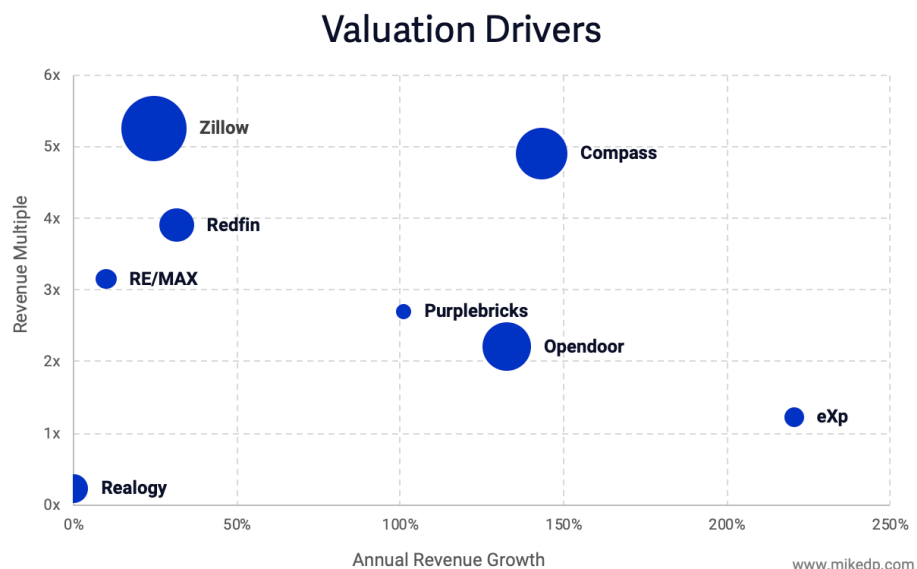
BASED ON LAST FULL YEAR FINANCIALS (2018 FOR MOST COMPANIES).

Growth rates significantly factor into a company's valuation; investors are generally more optimistic the faster a business is growing. This cohort of real estate tech businesses are growing revenues at vastly different rates.

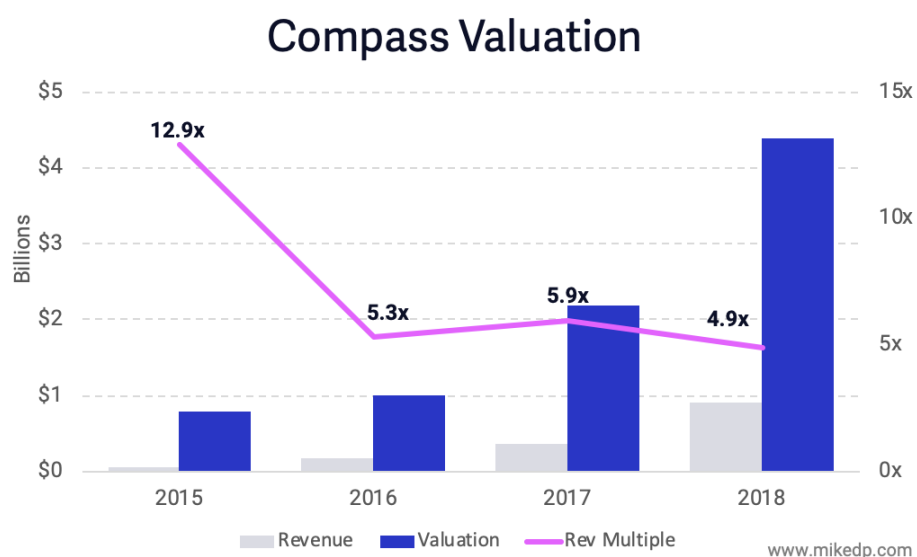
Annual Revenue Growth



However, a high revenue growth rate does not necessarily correlate to a high revenue multiple, as evidenced by the following chart. Of the fastest growing companies — Compass, eXp Realty, and Opendoor — Compass boasts the highest revenue multiple, more similar to Zillow and Redfin. (Bubble size denotes overall valuation.)



Over the past three years, Compass' valuation has been closely tied to its revenue, which is growing exponentially. As discussed in Part One of this series, that growth has come from an aggressive acquisition strategy. The revenue multiple for each of Compass' recent capital raises has remained consistent: 5x–6x. Investor sentiment has remained consistently optimistic.



Transaction volumes

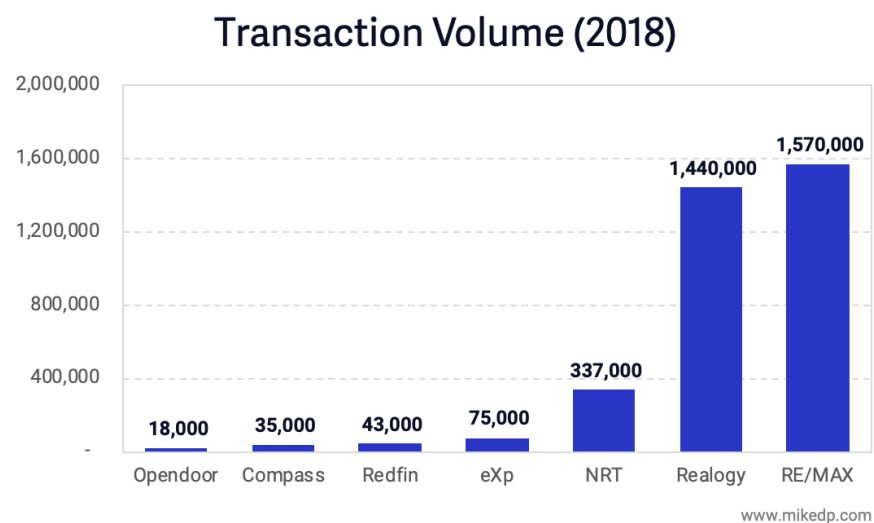
Another metric to consider when valuing companies — especially real estate tech companies that are involved in the transaction — is transaction volume. A number of the biggest companies in real estate, including those discussed here, are newly

obsessed with building end-to-end transaction platforms. And an important part of that platform strategy is offering ancillary services such as mortgage and title.

Another angle is the predictive and educational power of data. Whether it's Zillow, Redfin, Compass, or Keller Williams, all are talking about the power of data in their end-to-end platforms. Many companies consider it a potential competitive advantage, and are making heavy investments to build out enhanced data capabilities.

To fully realize its value, a platform needs to be used. The upsell opportunity around ancillary services and the predictive power of data all require transactions flowing through the platform, and the more the better. Similar to the benefits of network effects, more activity on a platform makes it more valuable. Thus, the more transactions a brokerage facilitates, the stronger position it should have in the overall ecosystem.

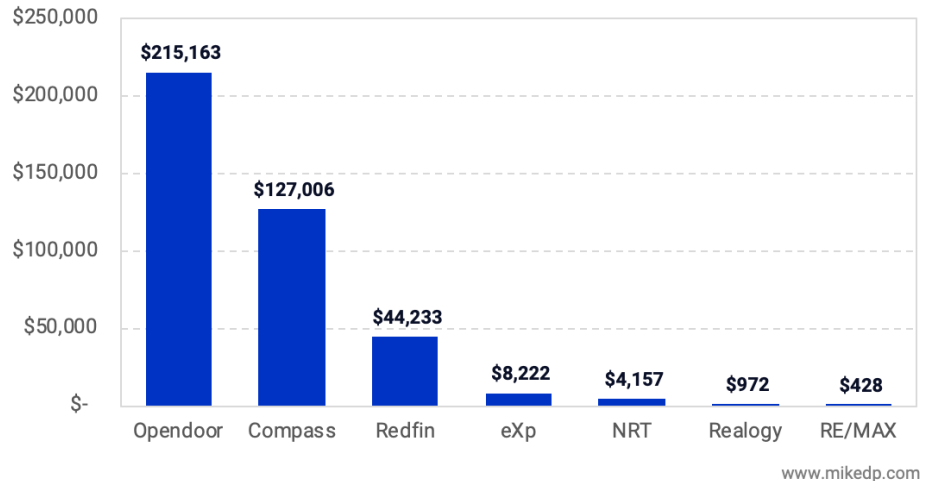
A transaction volume metric for company valuations is not typically used nor talked about in the industry. The number of transactions each company conducts, and the number of consumers they touch, again varies wildly.



Source: Swanepoel Mega 1000

Despite so much potential future value being attributed to ecosystems that touch consumers and facilitate transactions, it does not correlate to company value. In fact, it is exactly the opposite. The following chart shows company valuations divided by transaction volumes — or the “value per transaction.”

Valuation per Transaction



Even though Realogy and RE/MAX have, by far, the most transactions flowing through their systems, investors are ascribing very little value to them.

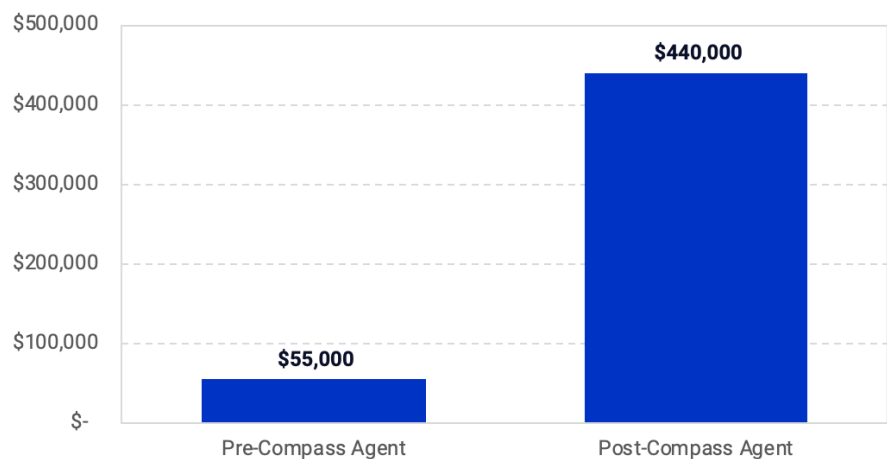
Agent count

Part One of this analysis looked at how much Compass was paying for its brokerage acquisitions. Since the start of 2018, Compass' agent count has increased from roughly 2,000 to 10,000. Of those 8,000 new agents, around 4,200 came from acquired brokerages. Assuming a total of \$230 million spent to acquire fourteen brokerages with 4,200 agents, that's a cost (or value) of \$55,000 per agent.

When Compass raised its latest round in September 2018, it was valued at \$4.4 billion, and at the time, had around 10,000 agents. Using the same methodology, each of Compass' agents was worth — or valued — at \$440,000.

Each of Compass' agents is worth — or valued — at \$440,000.

Agent Value

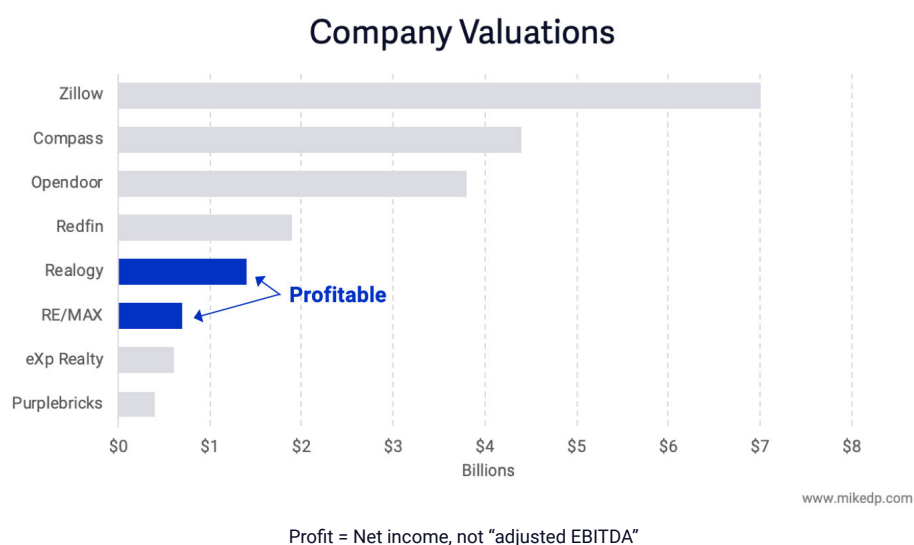


If brokerage valuations were driven entirely by the number of agents — which, incidentally, are the primary revenue drivers — investors are valuing Compass agents eight times higher than what Compass itself is paying other brokerages through acquisition.

What about profit?

There's one word missing from this analysis so far: profit. What role does the ability of a company to operate profitably play in its valuation? Not much.

Out of the companies mentioned in this analysis — Compass, Zillow, Redfin, RE/MAX, Opendoor, eXp Realty, Purplebricks, and Realogy — collectively worth over \$20 billion — only two are profitable: RE/MAX and Realogy. Realogy, the company with the absolute lowest revenue multiple of 0.2x, is profitable. Together, RE/MAX and Realogy are worth \$2 billion, less than half that of Compass. Clearly, the potential of future profits trumps the certainty of current profits for investors.



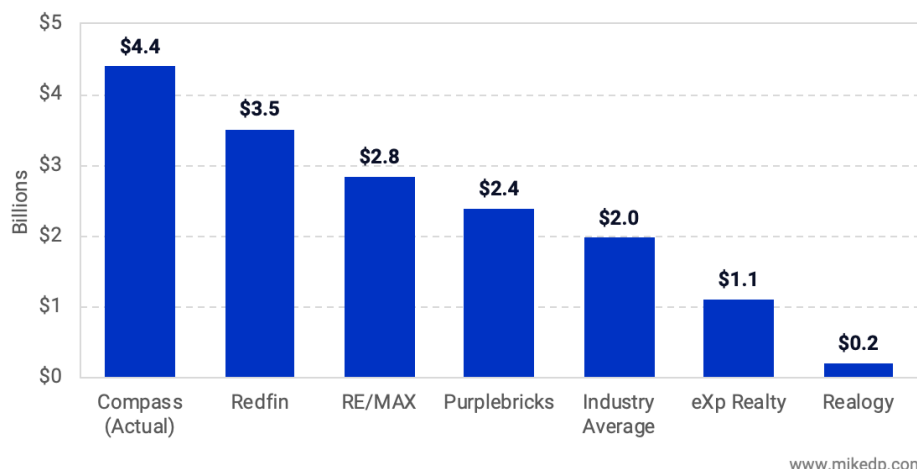
For investors, the potential of future profits trumps the certainty of current profits.

Peer valuation scenarios

What would Compass be worth if it were valued like some of its peers (using their revenue multiples)? It's already at the high end of the range for those with similar business models: RE/MAX, Purplebricks, Realogy, eXp Realty, and Redfin.

Compass is being valued more optimistically than any other traditional or tech-enabled brokerage by a wide margin.

Peer Value Scenarios



Compass is valued far and ahead of its peers, even those in the same class of technology-enabled brokerage. If it were valued similarly to Redfin, which is a public company, it would be worth \$3.5 billion — a \$900 million discount to its current valuation. Clearly investors see something more in the company.

If Compass were valued at Realogy's revenue multiple, it would only be worth \$200 million — over 20 times less than its current valuation! Remember: Realogy is profitable, sees over 40 times the transaction volume and has over 6x the revenue of Compass. This stat alone highlights the massive opportunity investors see for Compass, contrasted starkly with the bleak future forecast at Realogy.

A sustainable model?

Investors clearly see something more in Compass — something that massively sets it apart from its peers. Its valuation is being driven by a combination of massive growth fueled by an aggressive acquisition strategy, and the promise of a tech-powered platform to give it a competitive advantage over peers.

It's fair to say Compass is being valued as a tech company. In fact, Compass is being valued more optimistically than any other traditional or tech-enabled brokerage by a wide margin; its valuation more closely matches Zillow, a tech company with a completely different business model.

Having raised over \$1.1 billion, Compass is unequivocally causing a revolution in the traditional real estate industry. But how sustainable is its model? Can it keep up its aggressive — and expensive — acquisition strategy, and achieve profitability? And will agents, without whom Compass wouldn't generate any revenue, remain happy and stay under the Compass banner? These topics are explored in Part Four: Sustainability.

Part 4: Sustainability

Part One of this series took a detailed look at Compass' growth strategies, while Part Two examined if Compass is a tech company, or a traditional brokerage, and Part Three looked at Compass' \$4.4 billion valuation compared to its industry peers.

Part Four of this series looks at sustainability. Can Compass keep up its aggressive — and expensive — acquisition strategy? Will agents, without whom Compass wouldn't generate any revenue, remain happy and stay under the Compass banner? And perhaps most importantly, can the company generate a profit?

Compass is a growth stage business, and is not profitable.

The search for profitability

Compass is not profitable. Given its massive expenditures — both to support its brokerage acquisitions and to support its growing employee base — there's simply no way it can be making money. Nor should it be (yet).

Compass is a growth stage business, investing today for a more powerful and profitable tomorrow. The question for all growth-stage businesses is whether they can ever achieve profitability. A number of other real estate industry behemoths are also unprofitable on a GAAP basis: Zillow, Redfin, Opendoor, eXp Realty, and Purplebricks.

Compass, like all private companies, does not need to share its financials. But with the data it does make public, in addition to benchmarks against public company peers and a few educated assumptions, we can paint a rough picture of its financials. To refine my thinking for this analysis I've interviewed dozens of industry executives and insiders, including leaders of top brokerages, independent analysts, and current and former Compass employees and agents.

Revenue and gross margins

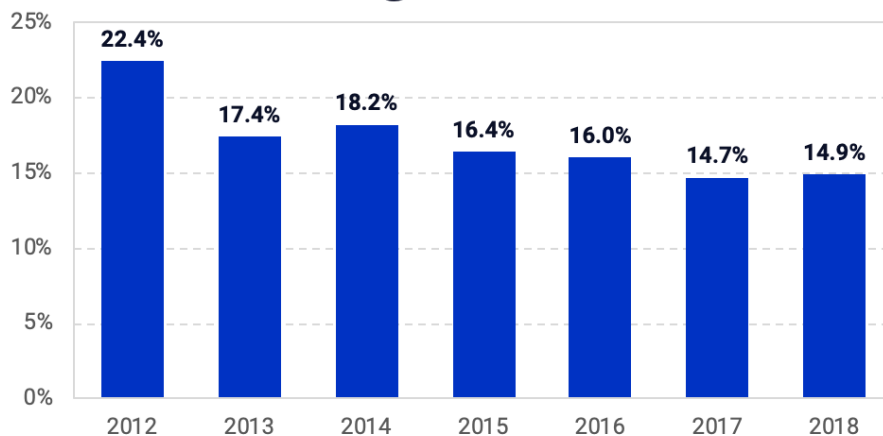
Compass ended 2018 with around \$900 million in revenue (source: [Robert Reffkin's letter on Inman](#)). Like its real estate brokerage peers, eXp Realty and Realogy, that number includes the full real estate commission, only a fraction of which Compass retains. A large percentage of that number is paid directly to agents (70%–90%), with a smaller percentage retained by Compass as its gross profit. This is the commission split.

According to [REAL Trends](#), which has been tracking the residential brokerage industry for decades, the average retained revenue (gross profit) of brokerages was 14.9 percent in 2018. The sample size is 200–300 of the largest U.S. brokerages.

“The firm has lured top talent with some of the most generous commission splits in the business.”

— The Wall Street Journal

Nat'l Brokerage Retained Revenue



Source: REAL Trends

High producing agents typically command more favorable commission splits as high as 90/10 — with only 10 percent retained by the brokerage. There is anecdotal evidence (including a number of agents I’ve spoken to, agents that Compass attempted to recruit, and brokers that have lost agents to Compass) that in some cases Compass offers 100 percent commission splits as a recruiting incentive, either for a certain amount of time or a fixed number of deals.

This is confirmed by the [Wall Street Journal](#), which reports, “The firm has lured top talent with some of the most generous commission splits in the business: Some agents received all the sales commission, with nothing going to Compass, on as many as eight of their first deals, according to offer letters.”

eXp Realty, another self-proclaimed tech-enabled brokerage with revenues of \$500 million in 2018, has [8 percent gross margins](#). eXp Realty also offers favorable commission splits with a cap on fees, and is the best benchmark available for Compass. It’s likely that Compass’ gross margin is in the 10–12 percent range, and for this analysis I’ve assumed 12 percent, resulting in \$108 million of gross profit in 2018.

Operating expenses

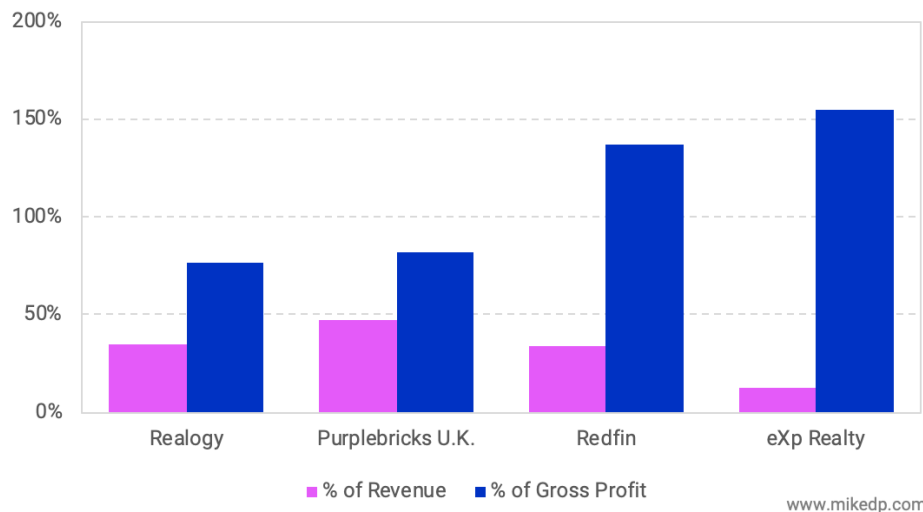
Estimating Compass’ operating expenses is more complicated. I’ve used three different methodologies in order to provide a range of data points:

- Operating expenses as a percentage of revenue
- Operating expenses as a percentage of gross profit
- Build-up approach

(Readers are encouraged to download the [companion Excel file](#) and plug in their own assumptions. It’s a choose your own profitability adventure!)

Compass has four publicly listed peers with similar business models: Realogy, eXp Realty, Redfin, and Purplebricks. Each company reports and breaks out operating expenses into various categories, including technology, marketing, and general and administrative. It’s straightforward to calculate each company’s operating expenses as a percentage of overall revenue, and as a percentage of gross profit.

Operating Expenses



On average, the four industry peers' operating expenses are 32 percent of revenue and 113 percent of gross profit (Redfin and eXp Realty are unprofitable). Applying those same averages to Compass suggests operating expenses of between \$122 million and \$288 million in 2018.

Compass Operating Expense (OpEx) Assumptions

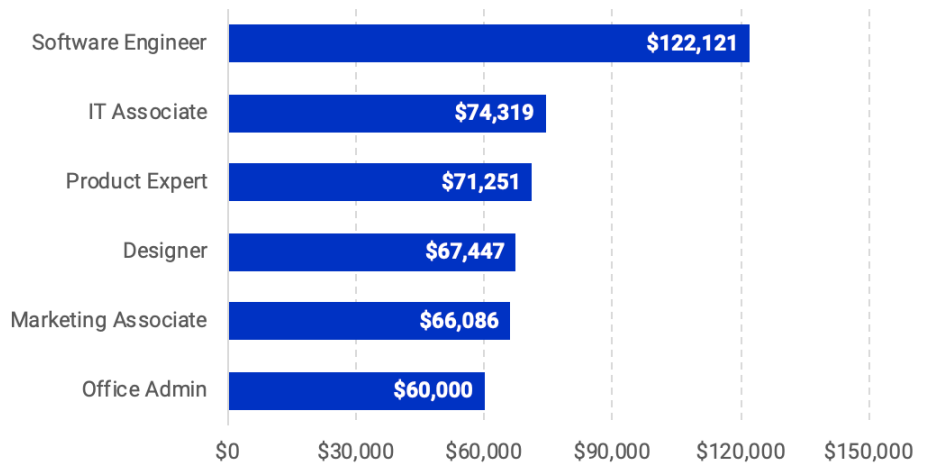
Methodology	Assumption	Operating Expenses
OpEx as % of revenue	32%	\$288 million
OpEx as % of gross profit	113%	\$122 million

The build-up approach for operating expenses focuses on known data: employee headcount and office expenses. Based on the [same source of information](#), here's what is known:

- Compass had 238 offices at the end of 2018
- Compass had around 1,500 employees at the end of 2018

Compass operates in expensive metro markets like New York City, San Francisco, and Seattle, so employee costs are on the high end of the spectrum. According to a review of 250 employees on [Glassdoor](#), the average salary for a Compass employee is \$72,000 per year (ranging from \$60k for an office administrator to \$120k for a software engineer).

Compass Salaries



Source: Glassdoor

That figure doesn't include benefits; according to the [U.S. Department of Labor](#), on average, employee benefit costs account for around 30 percent of total employee costs. That would put total employee costs at \$100,000 per head (salary plus benefits), resulting in an annual staff cost of \$150 million for Compass' 1,500 employees.

For office space, several industry insiders and CEOs of top brokerages claim that 75–100 square feet of office space per agent is a reasonable benchmark. Cushman & Wakefield [reports that the national average](#), across all industries, is 194 square feet per employee. I've assumed an average of 83 square feet per agent, or 3,500 square feet for each of Compass' 238 offices.

Compass pays from the [mid-\\$60s](#) to [mid-\\$70s](#) to [\\$80](#) per square foot for some of its NYC offices, and [\\$54 per square foot](#) for a San Diego office. I've assumed an all-up expense of \$60 per square foot, resulting in a total annual rent cost of \$50 million.

High-level Financials

Staff	1,500
Staff cost	\$100k per person
Total staff cost	\$150 million
Offices	238
SqFt/office	3,500
\$/SqFt	\$60
Total office cost	\$50 million
Total cost	\$200 million

Employee and office space expense alone totals \$200 million. This figure doesn't include a number of other one-time and ongoing expenses, such as sales and marketing and office fit-outs, which would push that number even higher.

This figure is Compass' expense run-rate, based on figures from the end of 2018, a year which Compass grew its employee count and office space incredibly fast. Taking a mid-point average (150 offices and 1,000 employees) yields an employee plus office cost expense of \$132 million for 2018.

(Based on a June 12, 2019 [update from Compass](#), there are currently 2,500 employees. Assuming 248 offices, the current employee plus office expense run-rate is \$300 million per year (not including other operating expenses), up from the \$200 million mentioned above.)

Based on rough industry benchmarks, Compass' operating expenses could range anywhere between \$122 million and \$288 million in 2018 (quite a range). But the build-up methodology suggests it was closer to \$150–\$200 million.

Compass Operating Expense (OpEx) Assumptions

Methodology	Operating Expenses
OpEx as % of revenue	\$288 million
OpEx as % of gross profit	\$122 million
Build-up approach	\$150–\$200 million

Operating expenses of between \$150 million and \$200 million in 2018 are nearly double Compass' gross profit. In other words, Compass would be spending between \$1.50 and \$2 for every \$1 in gross profit — not including its brokerage acquisition costs (which I previously estimated to be between \$220 and \$240 million, paid in a combination of cash and stock).

High-level Financials

Revenue	\$900 million
Gross margins	12%
Gross profit	\$108 million
Operating expenses	\$175 million
Net income (loss)	(\$67 million)

Profitability Catch 22

In its march towards long-term, sustainable profitability, Compass faces a dilemma. Like other brokerages, its gross profit is directly tied to the commission splits it offers agents. Profitability is a Catch 22: reducing commission splits for agents increases gross profit for Compass, but makes the company a less appealing home for agents.

Compass must look elsewhere for new sources of revenue — but it's unclear where.

“Short term profitability is something that many of the more modern companies are not as focused on.”

— Robert Reffkin
Compass CEO

Compass' chief operating officer told the [Wall Street Journal](#), “We're not yet at a stage where I have a very clear monetization strategy because we haven't really talked about it.” Its CEO said the company plans to make money through ancillary services like title, mortgage and insurance services, but it's not clear how. “Short term profitability is something that many of the more modern companies are not as focused on,” he added.

To grow revenues, Compass needs more agents closing more deals, and — unless something radically changes — those agents will require more, not less, support staff and office space. To reduce expenses, Compass would need to trim its full-time headcount or slow the hiring of support staff, or consolidate and close a number of its offices — both of which run the risk of making Compass a less attractive brokerage partner for agents.

The options available to Compass — optimizing the commission split and generating revenue by selling mortgages — are the same available to other real estate brokerages, and in fact, what they have been doing for years. Going down that path is an old game plan, which is why it's unlikely to be Compass' destination. Investors didn't pump over \$1 billion of venture capital into Compass to build “just another brokerage.”

Endgame

This analysis presents a thorough look at what Compass is doing; the alluring, unanswered question is *why*.

The company is deploying an aggressive acquisition strategy to acquire agents and brokers to build market share, is positioning itself as a tech company, and sports a sky-high valuation based on its growth rate and future plans — but what are its future plans? How does it plan to turn the existing, unprofitable brokerage business into a mammoth of the real estate industry? This is the topic of the next and final installment of this analysis: Endgame.

Part 5: Endgame

A [big hairy audacious goal](#) (BHAG) is a phrase, coined by author Jim Collins in his book *Built to Last*, meant to convey a company's visionary "moonshot" goal, often bordering on the unachievable. Think of SpaceX's aim to make humanity multiplanetary or Google's goal of organizing the world's information. These are BIG goals and exponential ideas, without a hint of incrementalism. And big ideas have a tendency to attract big investment.

Compass clearly has big ideas and big goals. But what exactly is its big hairy audacious goal?

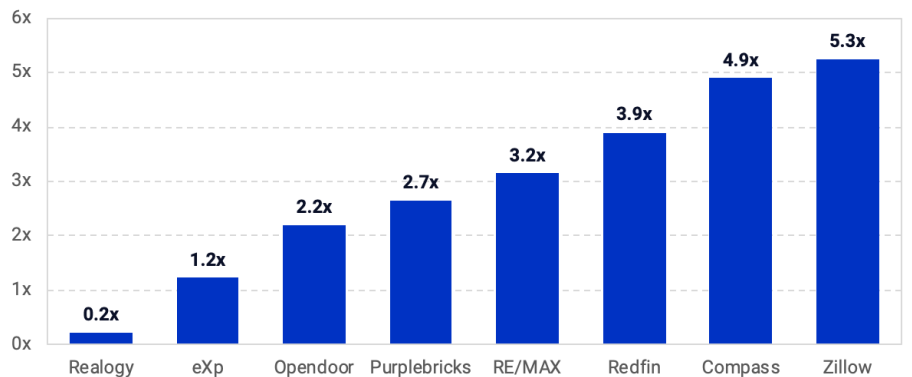
In real estate, optimizing the commission split and generating revenue by selling mortgages are what brokerages have been doing for years. Going down that path is an old, incremental game plan, which is why it's unlikely to be Compass' destination. Investors didn't pump over \$1 billion of venture capital into Compass to build "just another brokerage."

Compass clearly has big ideas and big goals. But what exactly is its big hairy audacious goal?

More than a brokerage

To justify its massive valuation and satisfy its investors, Compass must become more than a brokerage. Having raised over \$1.1 billion at a hefty \$4.4 billion valuation, Compass is already richly valued as a tech company rather than a traditional real estate brokerage.

Valuation: Revenue Multiple



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When a company raises venture capital, especially at the scale Compass has, investors expect a significant return on their investment. When SoftBank invested in Uber in 2018, it was valued at \$48 billion with expectations of a \$100 billion IPO (as of June 2019, Uber is worth around \$75 billion).

As a late-stage, private company almost certainly heading towards an IPO, investors likely have similar expectations for Compass — call it a \$10 billion valuation at IPO. Compass can't justify this valuation as a traditional real estate brokerage. Incremental improvements are not in the cards; to achieve a meaningful outcome for owners and investors, Compass needs to embrace more radical changes to its business model, and real estate in general.

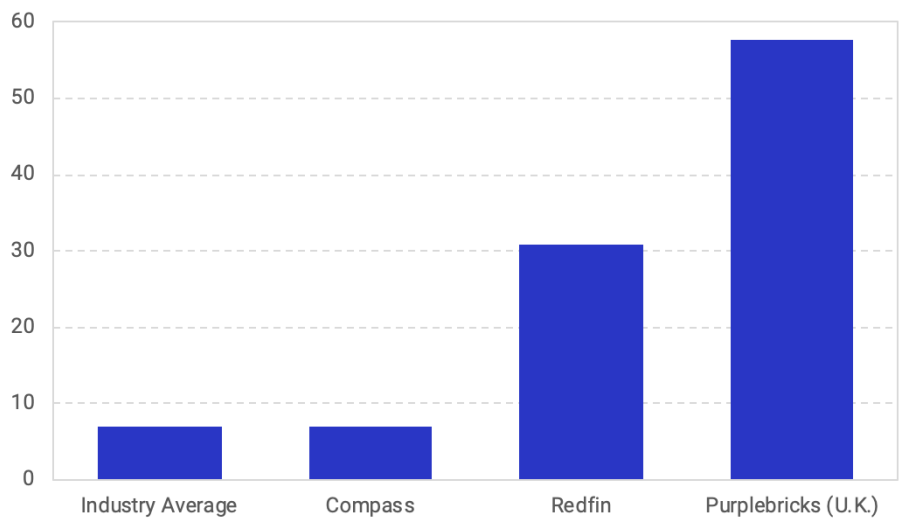
Changing the game

As we've seen in my previous analysis, Compass' economics are similar to a typical brokerage. The primary revenue and expense drivers are the same: revenue generated as a percentage of the commission from real estate agents, and expenses driven by employee costs, office space, administration and technology.

To date, the companies that have meaningfully shifted core brokerage economics at scale have all featured novel operating models. Redfin, with full-time, salaried agents, and Purplebricks, with a fixed-fee independent contractor network — both backed by significant lead capture and centralized support organizations — have demonstrated exponential efficiency gains.

Companies that have meaningfully shifted core brokerage economics at scale have all featured novel operating models.

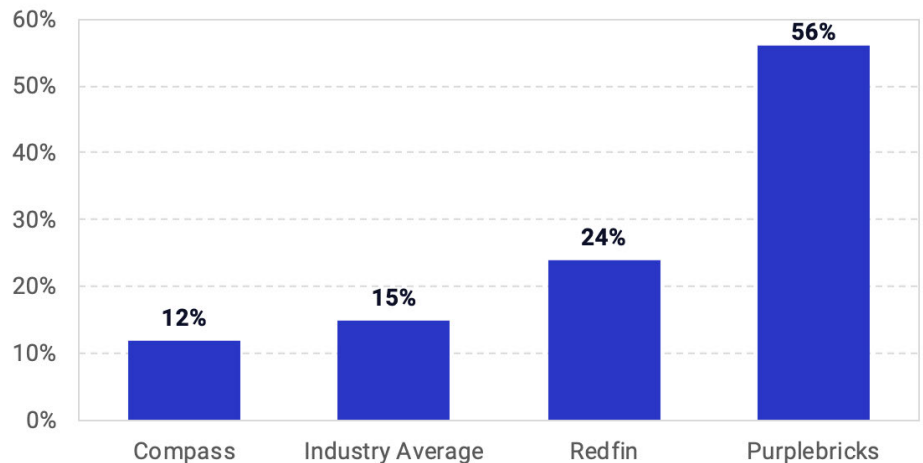
Transactions per Agent (2018)



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From an economic standpoint, the efficiency gains pay off for the brokerage. Redfin operates at a gross margin of 24 percent (about double Compass), while Purplebricks U.K. enjoys gross margins over 50 percent.

Gross Margins



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Compass: Estimate, Industry Average: REAL Trends industry benchmark, Redfin: FY2018, Purplebricks: FY19 (U.K. only)

Because of their novel operating models, Redfin and Purplebricks have a great deal of direct control over their agents, allowing them to standardize processes to deliver a more uniform and efficient consumer experience.

For Compass to break out of the traditional brokerage mold and fully realize its ambitions, it needs to become more than a brokerage, and more than a technology company. It needs to become a platform. And in doing so, radically change brokerage economics and, consequentially, the role of agents.

The platform play

To become a true real estate platform, Compass first needs to become a consumer destination.

Redfin has its portal, Uber has its app, and Purplebricks (in the U.K.) has its web site. In each case, consumers go directly to the company — not an agent or driver — to start their journey, giving the platform owner unprecedented ecosystem power. The platform owner controls the lead, distributes it, and takes a healthy cut of the revenue. If an employee or contractor doesn't perform to expectations, the company removes them. The platform owner is in complete control.

For Compass to become a consumer destination, it needs eyeballs. The most effective strategy — and likely the only possible strategy given the market dominance of Zillow — is to build consumer traffic with the draw of exclusive listings. It's a similar strategy to Netflix and Amazon's exclusive video content. If the Compass web portal advertises houses for sale that aren't available anywhere else, it draws consumers to the platform.

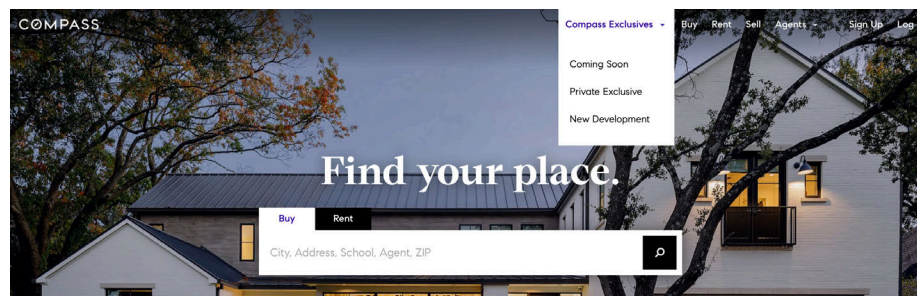
Building exclusive content

The secret to building audience with exclusive content is scale: Compass needs significant market share for this strategy to work. [Pocket listings](#), which are withheld from the MLS for a period of time, have been around for years, but never employed at

For Compass to break out of the traditional brokerage mold and fully realize its ambitions, it needs to become more than a brokerage, and more than a technology company. It needs to become a platform.

this scale. Compass needs to advertise so much exclusive content, including coming soon listings, that consumers can't afford to miss it.

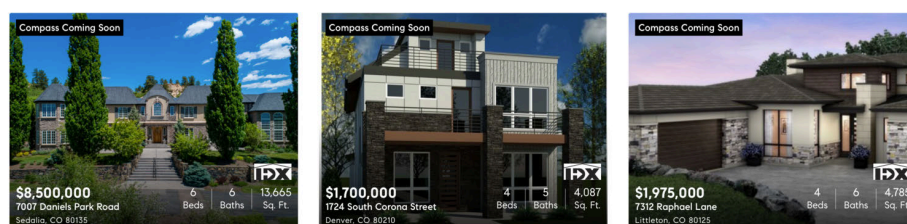
The evidence that Compass is strongly promoting exclusive content is plainly visible on its web site. In fact, exclusive content is the primary call-to-action on [Compass' web site](#), starting with top billing on its site navigation.



Scrolling down the page, the first content after the search box is a section highlighting exclusive listings before they hit the market.

Compass Exclusives

Be the first to browse exclusive listings before they hit the market.



A few Google searches for homes for sale in San Francisco yields the following results. Not only is Compass paying top dollar for its position, but notice who it is competing and bidding against.

San Francisco Real Estate | Search Compass Real Estate

[www.compass.com/](#)

Discover A Modern Real Estate Experience In San Francisco And Beyond. Collaborative Culture. Real Estate Listings · Exclusive Listings In SF · Welcome to Compass · New "For Sale" Sign · Rent

San Francisco CA Houses | Explore Houses On Zillow | zillow.com

[www.zillow.com/Houses/San-Francisco](#)

★★★★★ Rating for zillow.com: 4.7 - 959 reviews

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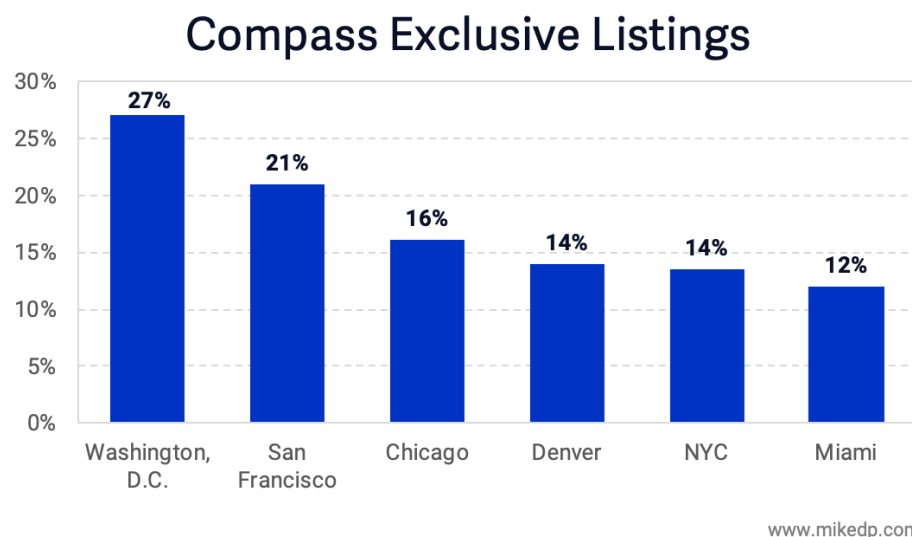
★★★★★ Rating for zillow.com: 4.7 - 959 reviews

Start Your Home Search Today. Contact A Local Agent On Zillow! Daily Alerts on Homes. Save Your Favorite Homes. Types: Homes, Townhouses, Condos, Apartments.

Compass is expending a considerable amount of resources to attract consumer eyeballs to its web site. In addition to the above, it has [search engine optimized pages](#) for exclusive properties in each market. This focus on exclusive listings currently sets Compass apart from Zillow, Redfin, Purplebricks, and most other traditional brokerages — no other company gives it this much focus (or any focus at all).

The result is a high proportion of listings that are exclusive to Compass (which includes coming soon). As of June 2019, anywhere from 12 to 27 percent of Compass listings in a market are exclusively listed on the Compass web site — a significantly

high number. Across six markets, that represents over 1,800 listings, none of which are advertised on the MLS or any other portals, including Zillow.



Compass is encouraging agents and consumers to list properties as Coming Soon as an effective pre-sales tool. [This agent team page](#) touts specific benefits, such as fewer days on market and more visitors at the first open home, while [this agent team](#) highlights the benefits of increased exposure and pre-listing feedback.

Flexing its platform power

Once Compass has consumer eyeballs, what's next? The same thing that Zillow, Redfin, and Purplebricks do: generate and control the distribution of leads to agents.

Recently we have seen more power being accrued in real estate platforms that distribute leads. [Realtor.com's \\$210 million acquisition of Opcity](#) and [Zillow's new flex pricing product](#) both charge real estate agents around a 30 percent referral fee when a transaction closes. Over time, the amount charged for a lead has consistently gone up.

Redfin and Purplebricks also control the flow of leads. Redfin distributes its leads to salaried agents, while Purplebricks pays its local property experts in the U.K. around 25 percent of a fixed listing fee. Both companies control the flow and distribution of leads to their agents, which is a necessary ingredient for a platform to fundamentally change the economics of a traditional real estate brokerage.

Endgame

It would be naive to think Compass has raised over \$1.1 billion in venture capital to become just another real estate brokerage. Even adding adjacent services like mortgage doesn't change the core economics of the broker model — bigger changes are required to justify its valuation. Compass has larger ambitions, and it's likely that its big hairy audacious goal is to become a real estate platform. The evidence suggests the following strategy:

- Build market share (listings) through aggressive agent recruitment and acquisition.

Controlling the distribution of leads is a necessary ingredient to change the economics of a traditional real estate brokerage.

- Once market share is high enough, encourage sellers to list exclusively on Compass for a period of time.
- Leverage exclusive content to drive consumers to the Compass portal.
- Launch a Compass platform that generates and distributes leads to agents.
- With platform power, transition the role of an agent (Redfin/Purplebricks/Uber), taking a larger cut.

Compass is a real estate disruptor on a scale never before seen in the U.S. With deep pockets and big ambitions, its impact on the real estate industry is only just being felt. Compass, its investors, and a number of well-funded peers are aiming for massive change in an industry that has resisted massive change for years. Whether its strategy succeeds or fails, the die is cast and the race is on.

For more real estate tech insights, analysis, and reports — and an overview of advisory services — visit www.mikedp.com.