Fractional Aircraft Ownership Programs: A Deeper Look into Why Operators Aren’t Profitable—Yet

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ADVISORY
Executive Summary

From only a handful of jets in 1990, the fractional aircraft industry has grown to more than 1,000 aircraft and more than 8,000 owners in the United States, Europe, and the Middle East. Revenue among the four largest operators now exceeds an estimated $4.0 billion annually, and yet despite its popularity, the industry has been consistently unprofitable—even the largest and most developed operators reported losses of more than $80 million in 2005. While market demand for fractional aviation services is strong and the ownership base will continue to grow, how long can these businesses endure without profits?

The industry’s poor financial performance is due not so much to inefficient operations management but rather to a flawed pricing system. The major contributor to the problem is not high fuel prices, excessive labor or capital equipment costs or most any of the other ills that plague airlines, which are at best very distant cousins of fractional aircraft operators. The reasons—and there are two—are far simpler. In what is truly a unique model, fractional shareowners are charged rates that are “one size fits all,” and yet the costs to service them vary dramatically. Originally established for the sake of simplicity, this undifferentiated pricing has led to a classic adverse selection problem, where unprofitable customers are provided economic incentives to choose fractional ownership over competing services, the prices of which might more accurately reflect delivery costs.

Efficient operations will always be a necessary focus of management effort, especially in inventory and logistics, fleet and crew planning and maintenance. These are areas where operators can start now to leverage best practices and the knowledge they’ve accumulated in the years since the industry was born to reduce costs and stem the “leakage” of money from the P&L. Sustained profitability, however, will only come from a pricing system that adequately recovers the costs incurred to service a customer.
Introduction

It started out as a great business idea: Get a bunch of people together who alone can’t justify owning an entire private airplane, allow them to purchase a fraction of one, then let everyone share access to the combined fleet. With enough participants and enough airplanes you could cover the whole country with a network of private aircraft—a private airline, departing anywhere for anyplace, anytime.

People liked the idea, and they still do. The fractional business model created in the late 1980s by NetJets is now a multibillion-dollar industry operating nearly 1,000 aircraft in programs on three continents. Customers include celebrities, executives, entrepreneurs, corporations large and small, and even government agencies. Aircraft manufacturers continue to enjoy unprecedented sales, and all types of support organizations, from caterers to fixed base operators (FBOs), are enjoying the trickledown effect, thanks in no small part to the impact of fractional operations.

There is no question that fractional ownership has been good for aviation. But despite the continued growth, for the most part none of the major operators has made any money—at least not with any consistency. Why? We can’t say for certain because of all of the fractional operations are either privately held or subsidiaries of larger companies, so details are few. But recent commentary in financial reports and a little bit of analysis of the fundamental pricing structure can yield some clues. The answer is not because of high fuel prices, excessive capital equipment costs or most any of the other ills that plague airlines, which are at best very distant cousins of fractional aircraft operators. The reasons—and there are two—are far simpler. In what is truly a unique model, fractional shareowners are charged rates that are “one size fits all,” and yet the costs to service them vary dramatically. This undifferentiated pricing has led to a classic adverse selection problem, where undesirable customers are actually given incentives to choose fractional ownership for their private aviation needs. The two characteristics that drive the profitability of a fractional customer, where they fly and when they fly, are simply not considered. Together with a service standard that guarantees availability, the result is a small group of customers that are so expensive to service that the losses incurred to satisfy them can overwhelm the profits made from the remaining larger group. These few customers simply do not pay enough to cover the costs to service their business.
Part 1: Revenue and Expenses

This Is Not a Business for the Faint of Heart

When one considers all of the moving parts of a major airline, most would agree that these businesses face formidable logistical challenges every day. Each departure is a carefully choreographed dance of schedulers, dispatchers, maintenance crews, pilots, and flight attendants, and every flight is subject to the external influences of air traffic control delays and weather. Every day is a veritable ballet with a cast of tens of thousands of employees, passengers, aircraft and support equipment, spanning nations and continents.

For a major fractional aircraft management company, however, the opportunity to operate as an airline would be like a walk in the park. With aircraft fleets often in the dozens and sometimes well into the hundreds, these private airlines have all of the scale that even the largest airlines have. In fact, the largest fractional operator, NetJets, operates more aircraft than Southwest Airlines. What fractionals do not have, however, is a schedule. No regular routes, no hubs, no timetable. Most airlines serve one or perhaps two hundred airports through a network of regional service providers. Private aircraft can operate to more than 5,000 airports within the United States alone, plus many more throughout the Caribbean, Mexico, Canada and throughout the rest of the world. Every day for a fractional operator begins with aircraft and flight crews spread among hundreds of airports. Yesterday was different, and tomorrow will be different once again. In fact, it’s a new picture every day, and as clients make new trip requests, aircraft break or weather interrupts, the picture changes—by the hour, and even by the minute.

Despite the challenges, most of the fractionals do a remarkable job operating their networks. With a safety record that surpasses even major air carriers, they show that they can get the job done. But they often do so at a tremendous cost, and are often forced to literally “buy their way” out of logistical corners. While success has provided several of the larger operators some meaningful economies of scale, size alone cannot overcome the effect of a pricing system that treats all customers the same.

Revenue Streams

Revenue streams and pricing structures for each of the fractionals are for the most part identical, and grew out of a desire to provide a more simple solution to the confusing and widely disparate charter market. Fractional operators sell an aircraft share, and then manage the aircraft on the customer’s behalf. Its customers, who are really aircraft share owners, typically commit to a five-year management agreement at the time of their purchase, during which they pay the management company a flat monthly fee and an hourly flight charge.
Aircraft Share Sale Revenue
Upon joining a fractional program, the customer purchases an “undivided interest” in a specific aircraft. The price is proportional to the share size, and for the most part it has to be a one-sixteenth interest or greater. Fractional operators often buy aircraft at a discount from the manufacturer, yet they are able to sell the share at a proportion of the full list price. During economic cycles where growth in the fractional industry is strong, the margins can be tremendous. During slow periods margins may thin and management may be faced with unsold inventory challenges, but this is certainly not a unique business problem.

Expenses, specifically the cost of the aircraft and related selling expenses, are highly correlated with revenues, so margins are relatively consistent. In fact, the profit generated from share sales has to be spread out over several years to comply with GAAP, and this has the effect of smoothing out the seasonality of fractional purchase activity. A stellar year-end sales performance, or a dismal one for that matter, will be spread out over several years of financial reporting. Assuming a favorable economic backdrop, decent brand, effective marketing and a competitive product offering, the aircraft share sales department is a relatively straightforward component of a fractional business’s financials.

But the organic growth of traditional fractionals has slowed over the last few years, and two of the largest operators have even shown considerable contraction. Existing customers now make up well over half of all new fractional sales as they trade to different aircraft or move to other providers. Much of the new business coming into the fractional operators is through new products such as membership cards. To be better insulated from the cyclical nature of aircraft sales, over the long term management can’t rely on new aircraft sales to make up for operating losses. Positive operating margins must be sustainable from management fees and hourly flight fees alone.

Monthly Management Revenue
All fractionals also charge a monthly management fee, which is designed to cover the fixed expenses associated with owning and operating an aircraft. These include hull and liability insurance, pilot salaries, training, customer service, crew travel and per-diem expenses, overhead and other miscellaneous support services. The retail rates are set in proportion to the share size a customer owns, but also include a share of the expenses associated with the extra “core” aircraft the operator must have available to be able to service higher demand levels that are an inevitable part of the guaranteed access commitment. More on this later, but because the costs generally represent the more stable fixed expenses of aircraft ownership and over the longer term can be scaled to a degree to offset a shrinking customer base, fees can generally be set with confidence to ensure reasonable margins.
Hourly Flight Revenue

This is where the rubber meets the road in fractional financials. While some twists are beginning to develop, the basic revenue premise is simply that customers are billed an hourly fee *only for the time that they occupy the aircraft*. The operator will typically add a bit of extra time to cover taxi time for takeoff and landing, but does not invoice the customer for any of the repositioning flight time that is required to meet the customer at the departure airport. That's only partially true, of course, because in the same way that management fee rates are set to be able to cover a certain number of “core fleet” aircraft, hourly rates are also set to cover the average expected repositioning costs. Nevertheless, hourly rates remain constant regardless of a customer’s choice of:

- Departure point
- Destination
- Time of departure
- Day of departure
- Advance scheduling notice given

Looking at the cumulative revenue, the resulting math is pretty simple: hourly revenue earned is in direct proportion to the number of hours flown. As demand increases, so does revenue. A graph of the revenue line looks something like this:

**Total Hourly Revenue vs. Demand**

The interesting part comes into view when you consider the cost side of the equation. If those five customer inputs didn’t have a direct impact on cost, then there wouldn’t be a need to vary the fees charged to cover the associated expenses. But they do impact cost, and they impact it dramatically.
To get more perspective on the importance of flight operations to the health of a fractional operator, it would help to see how the associated revenue and expenses fit into the overall financial picture. In 2005, share sales among the major fractional providers made up approximately 25–35% of total revenue before accounting for GAAP recognition requirements. Monthly management revenue made up about 25% of revenue, miscellaneous fees were 1–2%, and hourly flight fees made up the rest.

**Major Fractional Operators: 2005 pro Forma Income Estimate**

In the notes to their 2005 10-K reports, the parent companies of two existing fractional operators reported losses near $100 million. It’s worth noting that, to reach these losses, the variable operating expenses had to exceed both the positive margin from share sales and the positive margin generated by monthly management revenue. In fact, the losses associated with flight operations were large enough to overcome all other profit; $100 million plus the margin on aircraft shares sales, plus the margin on management fees, plus incremental revenue for miscellaneous expenses.

So what’s going on with flight operations?
Hourly Flight Expenses: A Very Slippery Line

The Core Fleet

One of the key characteristics of fractional programs is that shareowners can request an aircraft at any time, and the operator is obligated to provide an aircraft. If the operator doesn’t have an aircraft available, it must present a substitute from an outside charter provider. This comes at a significantly higher hourly cost for the operator, who often has to pay four to eight times the direct operating costs for an equivalent amount of charter. To avoid these costs, the operator has to keep extra aircraft and flight crews around for those times when more owners want to fly than the customer-owned fleet will support. Those extra aircraft represent the operator’s “core fleet.”

But how many core aircraft should be operated? Too many will lower the likelihood that charter will be required but will result in higher-than-necessary fixed costs to keep them available. Too few aircraft will reduce the fixed costs but increase the risk of having to use charter. In the end, it’s a strategic “make or buy” decision that the management of a fractional program makes based on their estimates of demand and the predicted readiness of the customer-owned fleet, as well as a determination of what level of charter will be acceptable to customers.

Early calculations for the fractional business model theorized that for every four aircraft sold, an operator would have to maintain one additional aircraft to maintain a charter rate of 2%. Reality has proven, however, that during periods of very high demand, the percentage can be many times that rate. The impact on the cumulative costs is dramatic as demand increases.

Total Hourly Expenses vs. Demand
At lower levels of demand, the slope of the cost line is relatively flat as trips are serviced through internal aircraft. But as the operator runs out of capacity and is forced to use outside charter, the costs mount rapidly.\(^{10}\) If you put the revenue and expense lines together, the problem becomes pretty clear.

**Operational Profit vs. Demand**

Note the area between the two lines—demand along the horizontal axis that's to the left of the intersection represents profit, and the demand to the right would result in a loss. Let's look at it a bit closer, because this chart really illustrates the problem with fractional aviation in a nutshell. It may help to think of this chart as a picture of what could happen with revenue or expense during any sample period, given a certain level of demand. The period it represents could be a day, a month, a week, a year—or even just an hour.

Most operators operate more than one fleet type, and in the event a trip cannot be met with a customer's specific fleet type, dispatch will usually try to service the mission on the next larger fleet type. This is referred to as a complimentary upgrade (or forced upgrade). Theoretically, total costs for the operator would be lowest when all demand is serviced by the fleets in which owners are contract holders. This is the green arrow in the following graph. It represents fiction of course, since this could only be the case if demand never exceeded capacity within all fleets, there were no mechanical delays, and therefore no complimentary upgrades or charter were necessary.
But in the real world a fractional network will have to provide complimentary upgrades to larger aircraft, and will have to use some charter during periods of peak demand. That increases costs slightly as shown by the yellow arrow. With demand at the yellow arrow, hourly flight revenue still exceeds variable operating expenses. The operator is using the optimum mix of core aircraft and charter. Margin, represented by the difference between the revenue and expense lines, is relatively thin, but there is some cushion available to absorb a limited amount of additional upgrades and charter if demand increases a bit more. Again, the use of some charter is not necessarily a bad thing, because the alternative is to maintain a larger fleet of company-owned core aircraft to cover spikes in demand.

**Operational Profit vs. Demand**

But eventually the operator will run out of aircraft, and because core fleet cannot be rapidly increased, the internal capacity becomes a hard ceiling over the short term. Demand beyond this point, which we’ll call the “level of critical capacity” and shown by the red arrow, would require nearly all additional trips to be flown by outside charter. As demand increases past the level of critical capacity the impact of the higher expenses associated with charter eventually reaches the breakeven point and losses mount rapidly.

Over the course of a year, most days are to the left side of the chart, but there are enough to the right...some very far to the right, that the average is to the right. The reason is simply that the current pricing arrangement offers the operator no ability to adjust the revenue line to correlate with the increased costs associated with excessive demand. Just a few days with demand levels above this point can wreak havoc on even a well-run business.
Part 2: Adverse Selection

The current fixed-rate, one-size-fits-all fractional aircraft ownership pricing system is a downright bargain to a relatively small group of customers that drives a large proportion of an operator’s costs. At the same time, the system charges unnecessarily high rates to the larger group that ultimately should represent the bread and butter of fractional operators. Flat-rate hourly pricing fails to consider the “where” and the “when” factor of a customer’s travel characteristics, and together these are the biggest influences on fractional profitability. Remember the five things that didn’t matter in the determination of retail pricing? Let’s take a look at how they impact costs.

Problem 1. The “Where” Factor: Remote Customers

Fractional operators only receive revenue for flights that are occupied. Repositioning flights are a cost item with no redeeming qualities, and the fewer an operator has to do, the better its margins will be. The benchmark statistic used across the industry to gauge performance is called “occupied rate,” or sometimes “utility.” It is simply:

\[
\frac{\text{Owner Occupied Hours Flown}}{\text{Total Hours Flown}}
\]

The higher the ratio, the better financial performance is thought to be. The inverse would be the “deadhead ratio.”

Consider an owner who wants to make a relatively short flight between two somewhat remote airports. Longer repositioning legs can be expected, and if the owner’s aircraft type is not nearby, the operator will have to either use a larger aircraft and absorb the accompanying incremental cost or provide a charter aircraft. Once the trip is completed, this aircraft will almost always have to be repositioned a longer-than-average distance to begin its next revenue-generating leg.

To illustrate this more clearly, let’s use as an example an owner who regularly flies between Bozeman, Montana, and Salt Lake City in a midsize business jet. Neither of these two regions of the country are common destinations, so there is a high probability that the fractional operator will have to reposition an aircraft for the pickup. Seattle might be a likely originating point, but an aircraft may be sent from anywhere. Once the relatively short revenue-generating leg is completed, the aircraft will likely need to be repositioned once again, since there are few revenue departures from Salt Lake City on any given day. The next leg will probably leave from Las Vegas, which is one of the most common destinations for private aircraft users.
With as much non-revenue repositioning time as this trip represents, clearly it is not a desirable mission for the operator. When you consider the economics, it’s easy to see how only a handful of these owners can undermine what would otherwise be a relatively profitable operation. Yet in the current pricing structure there is nothing that allows the operator to mitigate or recover the associated costs.

Let’s also look at it from the shareowner’s perspective. Aside from owning an entire aircraft, the less-expensive alternative to fractional is usually going to be the use of a charter. Unlike fractional operators, however, the charter customer usually does pay for repositioning legs, often making it an undesirable option for remote airports. Remember that fractional hourly rates are set with some expected repositioning time built in, but the repositioning expenses presented by a remote customer are more than the expected average. For these customers, fractional can often be less expensive than charter. If that’s the case, why would such a customer ever choose charter if fractional can be used for less?

**Bad Trip: Bozeman to Salt Lake City***

<table>
<thead>
<tr>
<th>Customer’s Choices</th>
<th>Charter</th>
<th>Fractional</th>
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<tr>
<td>Rate / Flight Hour (Hawker 800XP)</td>
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<td>Repositioning Charges</td>
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<td>Federal Excise Tax</td>
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<th>Fractional Operator’s Performance</th>
<th>Operator’s Own Aircraft</th>
<th>Charter Sell-Off</th>
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<tr>
<td>Trip Revenue</td>
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<td>Trip Expenses</td>
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<tr>
<td>Fractional Operator’s Margin</td>
<td>($319)</td>
<td>($6,362)</td>
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*The customer chooses fractional, and the operator can expect to lose money even if it is able to service the trip with internal aircraft.*

*Please see appendix for assumptions*
Long Trips, Better Airports—and Subsidizing the Remote Traveler

By contrast, let’s look at a customer who regularly flies from New York to south Florida, also in a midsize business jet. Both regions are very popular among private aircraft travelers and are frequented by the operator’s aircraft. The probability of having suitable and available aircraft nearby is therefore higher, and expected repositioning expenses will be lower. In addition, a long stage length like this is desirable for the operator because the repositioning costs that are incurred on either end are spread over a larger number of revenue hours. But because of undifferentiated pricing, customers who fly these profitable trips have just as compelling a reason not to choose fractional as the geographically remote owner had to choose fractional.

Because so many people travel by private aircraft along the east coast, there are many charter aircraft based at airports from Boston to Miami. Many of them would be suitable for a trip between New York and south Florida. More availability will usually mean lower repositioning costs will be charged to the customer, if any. Discounts can be negotiated with charter operators for empty-leg returns, and buying block time can get that rate even lower. For this type of trip, charter becomes a more competitive substitute, even after considering the intangible benefits fractional offers.

Good Trip: White Plains to West Palm Beach*

<table>
<thead>
<tr>
<th>Customer’s Choices</th>
<th>Charter</th>
<th>Fractional</th>
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<th>Charter Sell-Off</th>
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<td>Trip Revenue</td>
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<td>Trip Expenses</td>
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<td>Fractional Operator’s Margin</td>
<td><strong>$2,667</strong></td>
<td><strong>(8,789)</strong></td>
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</tbody>
</table>

The customer chooses charter, and fractional operator never has the opportunity to realize the solid margin this type of trip provides.

*Please see appendix for assumptions
So for the remote customer, fractional ownership often offers a less expensive option to charter, yet to the profitable east coast traveler, fractional is priced at a premium. This is the flip side of the same adverse selection problem. The current fractional ownership pricing model encourages the profitable customers who fly long trips over densely traveled routes to take their business to competitors. These customers might be expected to get discounts, but instead they are in effect subsidizing the expenses incurred to satisfy geographically remote owners. The remote customer is receiving a far better value than the more profitable one on the east coast.

What’s worse, many fractional customers are learning to game the system by using fractional shares for their remote, short trips and use charter for the longer ones. This reduces fractional operators’ share of the stronger margins provided by the best trips and leaves them with many of the burdens of remote trips. Without systematic means to identify and either screen or appropriately price owners, the “where” factor will continue to be a big source of unnecessary cost.

As big as it is, however, it’s not as big as the other factor—the “when” factor.

**Problem 2. The “When” Factor: Demand Peaks**

Imagine you ran a golf club that was obligated to give its members the tee time they wanted, even if they called late the night before they wanted to play. On a holiday weekend. Imagine that if you didn’t have the requested time available, you had to cover all of the expenses to take these members to another golf club. Your success would largely depend on how many members you had in the club, and if you were lucky they wouldn’t all want to play at the same time. Fractional aviation works in exactly that way. There are no sold-out flights, and there is no overbooking.15

Whether they travel by car, airline or private aircraft, there are certain times when people tend to want to travel. Looking at a typical day, demand is highest in the early morning and late afternoon. Over the course of a week, demand is higher on Monday mornings when business people depart for a week of travel, and on Thursday and Friday afternoons when they return. Recreational travel is bunched around end of the week departures and Sunday return trips. Similarly, over the longer course of a year, travel demand builds around holidays.
Capacity

To meet that demand, fractional operators must predict when it will occur by fleet type, by day, by time of day and by geographical concentration. The more advance notice managers have of what the demand will be, the easier it will be to deploy assets to satisfy it most efficiently. But because of the relatively long lead time required to add core fleet aircraft and hire the flight crews needed to fly them, the short-term capacity of a fractional operator’s own fleet is for the most part fixed. On the demand graphs shown on page 13, the network’s capacity is shown as the red line, which must be set to optimize the cost of charter sell-off (peaks above the line), and excess core fleet (valleys below the line).

A given snapshot of demand on a fractional network, with unique time, geographical and requested aircraft characteristics will directly correlate to a point on the cost curve. As demand characteristics change, the associated cost curve that represents the operator’s ability to satisfy that unique demand will also change.

Operational Profit vs. Demand

So if managers want to stay on the gradual slope of the cost curve, then their internal fleet capacity is the single most important metric in fractional aircraft operations. But what exactly is capacity? It is simply the percentage of departures that the fleet can accommodate at any particular moment in time. A fractional aircraft fleet’s capacity must be considered relative to the demand that exists at that moment by fleet type and by geographical concentration. Capacity is constantly changing, impacted not only by daily fluctuations in maintenance requirements, crew limitations, air traffic control, weather and geographical concentration of the fleet but also by the fluctuations in demand it is expected to satisfy.16
Demand Peaks and Valleys
The initial fractional business model provided for ownership interests of one-quarter share aircraft, with some possibility for one-eighth shares. Yet over the ten years since the business began its most significant growth, fractional shares of one-sixteenth have become by far the most common. Presented with the opportunity for significant growth, management began selling smaller shares with the added hope that the additional customers would fill in the valleys of the demand cycles. They also believed that they would benefit from the economies of scale the additional aircraft shares would provide. But if you believe that people’s travel habits are for the most part similar, more owners will translate to a higher probability that more people will want to use the aircraft at the same time. Unless the access granted to these users is meaningfully restricted, the impact on fractional operations is easy to predict.

While fractional operators are beginning to place restrictions on the use of card membership flight hours during periods of higher demand, the lessons learned have been particularly painful.

In Fractional Aviation, Demand Doesn’t Have to Care About Supply
Just as the geographically remote fractional customer enjoys the same pricing as one that flies between well-traveled points, so does the customer who travels only on the high-demand days. In fact, an owner requesting a trip between Bozeman and Kalispell pays the same rate on a Saturday in late April as on the day before Thanksgiving.

Once again, the less desirable customers are given incentives to choose fractional. Instead of struggling to find a charter provider for the busiest travel days when availability is tight, these customers can simply sign up with a fractional provider and turn all of the operational and financial risk over to them. Yet the customers who don’t travel during peak periods pay the same rate as those who do. Once again the customers who place little strain on the network are subsidizing those who do.
Part 3: Changing the Game

Assuming that excess core aircraft are not carried, by far the most effective way to control operational losses in fractional aircraft management is to delay the use of outside charter as much as possible. Moving the cost line to the right provides the biggest increase in the margin area between the revenue and expense lines.

Operational Profit vs. Demand

Moving the line can be done in two ways—optimize network capacity or change demand.

Optimizing Capacity

This means positioning all of the elements that will be required to enable each aircraft in the fleet to fly as many trips as necessary in a given period. Like any supply chain, the process is only as strong as its weakest link. Ultimately, aircraft and flight crews must be brought together at the proper time and in the proper location to service the trips that customers demand.

But optimizing capacity doesn’t mean maximizing capacity all of the time. Demand is dynamic, so optimizing capacity means managing resources to ensure that assets can be in place to meet demand as it is expected to develop. The more visibility management can gain into demand as it is building outside of the 48-hour tactical window, the more effectively they can deploy resources. Aircraft can be drawn down into scheduled maintenance a few days early, and scheduling optimizers can more effectively position crews and aircraft. Though creating the ability to look further into the future is no small undertaking, it is the critical capability that will differentiate efficient fractional providers from inefficient ones.
Changing Demand

Because hourly flight fees are set at the beginning of a five-year management agreement, fractional operators have little opportunity to rapidly deploy a strategic pricing overhaul. Surcharges cannot be introduced, and discounts would only benefit the customers that place the least amount of strain on the system. Over the short term this would erode revenue and do little for overall costs, as those enjoying discounts would be the customers who are subsidizing the geographically remote and peak-demand customers.

Changing, and even shaping, demand requires management to challenge some of the assumptions on which the fractional business was predicated, and in the end may be the most difficult to implement. Variable pricing, preferred airports and even restricted capacity are potential elements of an overhauled business model. Some of these are beginning to make their way into fractional pricing plans, but nothing that alters the basic premise of the fractional ownership business model. Changes that can be expected to have a meaningful financial impact will require a paradigm shift—a strategy that questions current perceptions of customers’ expectations and how they define value.

In the meantime, efforts to improve operational efficiency and increase capacity must be the focus. While the shape of the cost curve is for the most part fixed, determined by the long-term core fleet strategy, management can do things now to move it—and thereby widen the gap between revenue and expense. As in any business, attention to operating expenses will always be critical, and this is especially true in fractional aviation.
Part 4: In the Meantime, Efficiency and Cost Control

Although it’s been said that “you can’t save your way to profitability,” devotion to cost control will always be a key ingredient of profitability. That means a focus on operational and financial efficiency—optimizing processes and minimizing unit costs.

Demand vs. Profit from Flight Operations

In the world of fractional operations, the rapid pace of business and a constantly changing environment can force operations to be more reactive than proactive—particularly when it comes to designing and monitoring processes. But without established procedures and robust methods to ensure they are complied with and updated as necessary, efficiency suffers. Mistakes are repeated and costs are higher than necessary. While working through a mechanical breakdown at departure time will always require a dynamic response strategy, processes can nevertheless be created to ensure that the recovery effort is appropriate.

Information flow is critical in any complex network business, and with what is truly a unique and unusually complicated model, fractional operators have few ready-made IT platforms with which to manage all of the different operational and financial elements. An airline model doesn’t fit any better than a manufacturing platform does. As a result, most work comes from an unconnected array of systems designed to individually manage maintenance, reservations, fleet and charter optimization, human resources, crew scheduling and general accounting—with traditional desktop applications used to fill the gaps. While some operators have made significant investments in customized applications, a fully integrated network that spans the entire supply/service chain remains elusive.
But there are opportunities in the meantime. First, what will the information system look like when it’s finished? Perhaps it will never really be “finished,” but what are the core capabilities it must have? What processes can be designed and implemented now? Until such a network is developed, it is even more critical that management establish and monitor the processes, controls and reporting structures among business units. Operational and financial risks must be identified, and mitigation strategies designed and implemented. The result will be a more efficient operation, lower costs, and less “leakage” of money from revenue that has been earned but not collected, and from expenses paid that have not been incurred. Some of the more significant examples include:

• **Third-Party Maintenance:** Outsourcing of maintenance is playing a significant and growing role in the fractional industry as operators identify scheduled work as a “non-core competency” and delegate it to third-party vendors. But which elements should be outsourced? Where outsourcing has already occurred, management must periodically evaluate the effectiveness of event scheduling and the integrity of the financial relationship. Monitoring and oversight of these relationships can often become secondary in the fast-paced world of fractional operations, yet it can be a significant source of waste as billing errors occur and warranty claims go uncollected.

• **Parts Management:** The geographic challenges of relatively random flight operations and fixed maintenance bases make inventory management a challenge. Some operators are outsourcing elements of parts procurement, while others maintain most control internally. In either case, the design of robust processes and compliance oversight is a key to successful cost control. Vendors’ internal processes must be reviewed and regularly audited to ensure contracted pricing rates are honored, and to verify proper credit for warranty claims.

• **Logistics and Procurement:** The optimization of processes that support logistical elements such as crew travel, accommodations, and meals as well as customer-related support functions must be pursued with more than just the goal of absolute “lowest rate.” By working to ensure that crews are in position, rested and fed, crew-supporting logistical functions are critical in an operator’s ability to maximize available capacity. Low material cost is critical, but the value-added elements that directly or indirectly improve capacity through better reliability or management flexibility may far outweigh absolute unit cost. In an effort to verify lowest rates, partnerships with airline, hotel, catering and general supply vendors may require third-party independent review to ensure compliance while maintaining independence and confidentiality.

• **Customer Profitability Differentiation:** Does the sales department have the ability to know that it is proposing a contract that will probably lose money over the course of the management agreement? To better understand the marginal and collective impact of individual fractional shareowners, operators must develop processes to evaluate the expected relative costs incurred to service them. Incentives for both sales personnel and prospective customers should be aligned with the long-term interests of the company, and must recognize that the profit realized in the initial share sale can be lost many times over the course of the shareowner’s management contract.
• **Billing and Accounts Receivable:** With hundreds if not thousands of individual owner contracts against which a fractional operator must coordinate scheduling, operations and billing, it is little wonder that “billing errors” has often been cited as a leading complaint among fractional shareowners. Even if the customer relationship management (CRM) solution is sufficiently robust, without effective processes and controls it is impossible to ensure that credits are distributed appropriately, fleet upgrade and overuse charges are applied, fuel surcharges are collected, and miscellaneous landing fees and concierge expenses are passed through. Vendors, procurement, in-house maintenance and third-party support providers must operate within a coordinated framework to ensure that data are accurate and credits are properly applied.

• **Labor Contracts:** Unionization of pilot workforces has begun in the fractional industry, and will likely continue across all national providers in the coming years. These contracts are typically extremely complex, and the grievance awards that can be the result of noncompliance can significantly increase labor expenses. Processes that ensure adherence to the contract’s work rules and mitigate the impact of grievance awards can have significant direct and indirect value.

• **Charter Procurement:** Advance purchase of block charter may reduce the unit cost as network capacity is stretched, but can be an expensive proposition if demand does not reach predicted levels and prepurchased charter capacity is not used. Strategic alliances with charter operators may provide flexibility and an opportunity to reduce unit costs. But like any vendor relationship, careful monitoring of the financial and accounting interactions is important to ensure accurate billing and prevent overpayment. When dealing with a portfolio of dozens of vendors, many of whom may not have robust financial control processes, it becomes critical.

• **Key Performance Metrics:** Across many industries, finance and accounting functions are often considered to be “backoffice support,” but accurate information flow to and from these groups is absolutely critical to efficiency in a fractional operation. With hundreds of decisions to make every day, managers and line personnel in every department must have the very best information possible to ensure the resources they deploy are the right ones. Are functional leaders getting the operational and financial information they need to manage their businesses? Are crew scheduling, maintenance and flight scheduling managers using the right key performance indicators? For example, when does the repositioning rate really matter? What are the best ways to quantify maintenance department performance?

Improving efficiency and plugging the financial leaks are interim steps in the development of fractional aviation, but mastery of internal processes is more critical now than ever. To improve any or all of these also provides indirect benefits of enhanced Sarbanes-Oxley compliance and improves return on invested capital (ROIC) and working capital metrics.
Conclusion

Despite the financial challenges, fractional aviation is here to stay. Driven by the passion and dedication of thousands of people, the outstanding level of service reported by the vast majority of customers is remarkable. Customers clearly want this service.

Visionary fractional operators have an opportunity to redefine the business model just as advances in airframe, engine, and navigation capabilities align in the most dramatic aerospace convergence in decades. Many new markets will be opened from the portal offered by the fractional aircraft ownership model, and to those prepared with a disciplined operation and the vision to recognize and deliver value, the future is bright indeed.

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Recent accounting pronouncements have required that fractional operators recognize share margin under the rules prescribed by EITF-0021. Rather than booking revenues and expenses associated with the sale of aircraft shares at the time of the sale, operators must spread them over the course of an expected fractional contract life.

Over the last few years most fractionals have instituted a fuel surcharge to recover the cost of rising fuel prices. The net impact of this, however, is simply to increase the hourly flight fee.

EITF-0021’s adjustments to the recognition of share sale revenue can have a significant impact on the relative weight of each revenue stream. Also, membership cards can be accounted for a number of ways, and here they are assumed to be in hourly flight revenue.

In most programs, hourly flight revenue actually consists of several parts:

- Base hourly revenue, which is based on the contracted rates for hours flown in the fleet that the shareowner holds an interest. The operators average rate in any period is most impacted by the mix of fleet types flown.

- Interchange revenue represents the premium rates paid by shareowners when they request flights in a fleet other than the one in which an interest is held.

- Fuel surcharge revenue seeks to recapture the operator’s rising fuel costs. The expense that exceeds the base fuel component included in the contracted rate is passed to the shareowner as an hourly surcharge.

- Miscellaneous revenue, such as supplemental catering, repositioning charges for flights outside of predetermined service areas, cancellations, etc.

The fixed expenses are assumed to generate a positive margin as previously mentioned. If an operator were to maintain an excessive core fleet, one might expect that monthly management revenue would not be sufficient to overcome the additional carrying costs. But an excess core fleet would be expected to drive lower charter sell-off expenses, and this was not the case in 2005.

Remember that while some core expenses are included, the management fees are set once at the beginning of a customer’s five year contract with a forecasted core fleet size built-in for the entire term. A increase in the core fleet would not be offset by any additional revenue.

In the first quarter of 2006 the major fractionals experienced extremely high levels of demand, and Warren Buffet, the Chairman of NetJets’ parent company Berkshire Hathaway, specifically blamed the expenses from charter sell-offs for the dismal financial performance of the period. Most fractional shareowners are willing to pay a premium for the perceived benefits the business model provides, including a perception of enhanced safety, simplified pricing, and more consistent service. For the most part, they will not accept more than the very occasional sell-off trip.

Where the aircraft are positioned geographically can also have an important impact on capacity. A large proportion of aircraft positioned on the west coast after a typical wave of late afternoon east to west trips will leave a large proportion out of position for early morning departures on the east coast. This can be particularly true for large cabin aircraft.

"Remote" is a relative term, as it describes the proximity of an origin or destination relative to a network’s typical service area. Fleet size can mitigate some of the effects of remote operations, as can a limited service area. In either case, an operator is theoretically more likely have aircraft in a position to be deployed without excessive repositioning.

Many charter operators have often enjoyed the ability to “double dip” their customers, charging one for the “repositioning” of an aircraft that in reality was occupied by another paying customer. This will continue, but increased competition, improved transparency and better insight will allow many customers to avoid the practice or pay reduced “empty-leg return” rates.

The industry has for the most part defined certain days as “peak travel days” where advance-booking notification requirements are lengthened and where departure times can be adjusted by the operator within given limits. But even once capacity is reached, the operator still has no ability to refuse flights.

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In this context, “excess” does not mean “any” core aircraft, but any above and beyond what is considered to be optimal for the target mix of internally flown and chartered aircraft.
Appendix

Charter Assumptions

- **Hawker 800XP**: $3,600 per hour
- **Miscellaneous charges**: 5%
- **Take-off/landing**: 0.2 hours total for each leg

**Bozeman to Salt Lake City**
- **Occupied leg time**: 1.1 hours
- **Repositioning assumption**: 100% of Revenue Leg (assume SLC – BZN for pickup): 1.1 hours
- **Takeoff and landing tenths**: 0.4 hours (total over 2 legs)
- **Total hours billed**: 2.6

\[ 2.6 \times 3,600 = 9,360 \]  
\[ + 5\% \text{ Misc:} \quad 468 \]  
\[ + 7.5\% \text{ FET:} \quad 737 \]  
\[ \text{TOTAL:} \quad 10,565 \]

**White Plains to West Palm Beach**
- **Occupied leg time**: 2.6 hours
- **Repositioning assumption**: Billed an additional 50% of occupied time. (Available from discounted repositioning rates, pickup of aircraft away from home base, or multiple trip average with benefits from roundtrip pricing): 1.3 hours
- **Takeoff and landing tenths**: 0.4 hours (total over 2 legs)
- **Total hours billed**: 4.3

\[ 4.3 \times 3,600 = 15,480 \]  
\[ + 5\% \text{ Misc:} \quad 774 \]  
\[ + 7.5\% \text{ FET:} \quad 1,219 \]  
\[ \text{TOTAL:} \quad 17,473 \]
Fractional Ownership Assumptions

Shareowner Assumptions
- Utilization of available hours: 100% Billed
- Average stage length: matched to sample trip
- Takeoff and landing tenths: 0.2 total hours per leg
- Rate per flight hour: average occupied hourly flight fee (includes fuel surcharge), $2,511 in Year 1 with 3.0% annual increase. After considering takeoff and landing tenths:
  - Shareowner with 1.1 hour average occupied leg (inflight utilization = 84.6%): $3,151
  - Shareowner with 2.6 hour average occupied leg (inflight utilization = 92.9%): $2,871
- Occupied charges: Leg time x rate per flight hour
- Repositioning charges: none
- Federal excise tax: 7.5% of hourly flight fees
- Allocated fixed expenses:
  - Share Size: 1/8 (100 hours)
  - Capital Cost: $1.6 million
  - Aircraft Residual: 75% after 5 years
  - Shareowner’s Cost of Capital: 7%
  - Monthly Management Fee: $16,724 in Year 1 with 3.75% annual increase

Fractional Operator's Assumptions
- Trip revenue: shareowner’s hourly flight fees, takeoff and landing tenths included
- Trip expenses: Incremental analysis, variable expenses only
  - B/CA August 2005: $1,273 per hour
  - Increased at 3% per year, average over 5 years = $1,352
  - One half of the operator's expected repositioning time is allocated to the cost of the sample trips, as the other half would attributed to the previous and subsequent revenue legs. the resulting total block time driving BZN-SLC and HPN-PBI variable expenses are 2.8 and 3.55 hours respectively.
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