



# REPORTING 101: BOOKING CURVES

An Embark advisory product

## Overview

The value of quality reporting cannot be overstated; it is essential to every decision made by a data-driven commercial team. In this four-part series, we plan to introduce some powerful, basic reporting that (when used effectively) can materially impact an airline's performance.

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*“If you do not know how much money you made, any business decision you make is no better than guessing.”*

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There are three primary reports that are critical to the success of an airline’s commercial and revenue management teams: The Advance Booking Report (ABR), Booking Curves, and Sales Report. Together, these three reports provide the airline with the information needed to handle most routine business actions such as inventory and fare adjustment, fare sales, and recommendations for capacity adjustment. A fourth report, the Competitive Capacity Watch, provides key insights into industry capacity changes made by competing airlines. When combined with the other reports, it helps provide insight into market level revenue performance trends. This article, the third in the reporting series, covers booking curves.

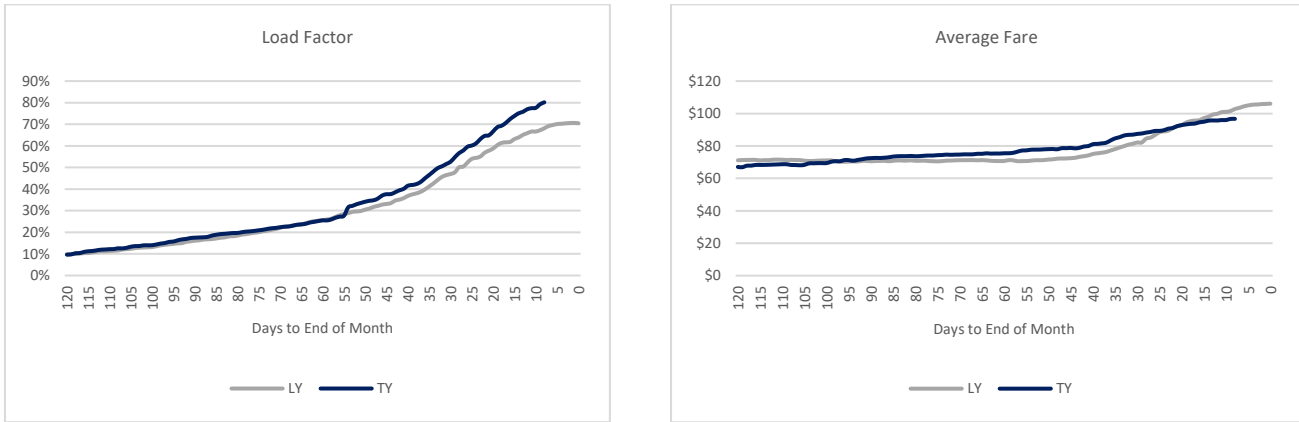
### **What are Booking Curves?**

The **Purpose** of a booking curve report is to provide revenue managers a visual comparison of booking trends for a flight, or a group of flights, against a predetermined benchmark or target. The most common variables analyzed with booking curves are passenger booking volume (or load factor) and average fare. Once passenger bookings begin for a flight, the pace of bookings is commonly compared to the prior year as a benchmark. If data for the prior year does not exist or is not available, a forecast is created to evaluate performance based on similar markets. Using this data, the revenue managers can evaluate whether a change in strategy is necessary, identify time periods for fare sales, and identify other opportunities for improvement. As illustrated in examples below, booking curves typically show a period before departure of 4 months which encompasses when most bookings are made.

For **Context**, we display two curves simultaneously on each chart: This Year (TY) and Last Year (LY). Making a Year-over-Year (YoY) comparison removes confounding variables such as seasonality. There is also built-in contextuality within each curve itself, as current performance is shown continuously alongside past performance.

**Succinctness** informs our decisions on what range of departure dates to summarize and how many days out to display the data on the x-axis. In theory, booking curves can show data for as few departures as a single flight and as many as the entire history of an airline. A month is long enough that normal fluctuations in demand do not obscure larger trends, which would not be the case when showing a single day or even a week of departures. A month is also short enough that it is still possible to see trends that do not necessarily continue outside a given season, which is particularly important when trying to maximize revenue in peak periods. Similarly, we recommend showing a number of days from departure that encompasses approximately 90% of bookings. For most flights, this will include a four-month period before departure. Including bookings further from departure compresses the data, making it harder to see the close-in trends which are of greater importance, while starting closer-in runs the risk of obscuring trends until it is too late to react.

Shown below is an example set of Booking Curves:



**How do I use the Booking Curves?**

Booking curves are not used in the same day-to-day manner as the ABR, but rather provide additional detail for more in-depth analysis as determined necessary by a review of the ABR or Sales Report. As mentioned, they are primarily used to evaluate necessary changes to a strategy, identify time periods for fare sales, and identify opportunities for improvement.

The Booking curves are also instrumental in developing inventory management strategy. Once a booking curve is established, it is possible to create “guardrails” to alert you to flights that are booking ahead of or behind the curve. By tracking flights throughout the life of the booking window the revenue manager can identify flights that are booking too fast or too slow based on their demand profile. Flights that are booking ahead of the curve are selling too many low-priced tickets, and the lower valued inventory should be removed from sale. Flights that are booking behind the curve are typically not offering enough low fare products; in general, cheaper fares should be offered. Figure 2 provides an example of a typical flight and how after establishing the guardrails, an analyst would ‘flag’ these flights and adjust. There are revenue management systems that can flag thousands of flights, or even be automated with business rules to adjust. For smaller operations, these flags can be done with simple excel tools.

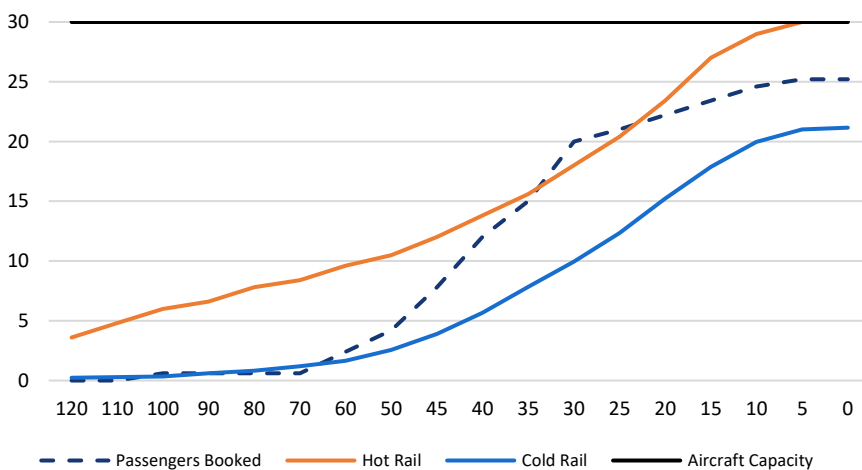


Figure 2: Booking Curve with Guard Rails

In this example:

- Around 80 days from departure, the flight falls below the 'cold' guard rail. The analyst opens more lower fare inventory
- Around 35 days from departure, the flight starts booking above the 'hot' guard rail. The analyst then closes discount inventory.
- On day 0, the flight flies within the target range

While this example is relatively simple, experienced revenue managers can make thousands of micro-adjustments during a single month, typically reviewing a single flight several times from the point it starts selling to the time it flies.

### ***In Conclusion***

Quality reporting is critical to nearly every decision made by the commercial team at any airline. Understanding the market dynamics and sales trends allows for quick and effective action and response to any situation. As experienced reporting experts, the Embark team has worked with data directly from reservation systems, from system utilities such as Radar by Radixx, and third-party data tools like Planitas. We have extensive experience with data validation and with compensating for the limitations of various data systems. We are confident that our reporting presents our clients with the best and most accurate information available. Better communication of data leads to better decisions; better decisions lead to better business.

### **CONTACT US**

Embark is more than a consulting firm; we help craft airline business strategy - then work with our partners to make it a reality. Embark provides airlines with (short-term or long term) outsourced support across any commercial function. Whether support is required with scheduling, or developing strategic airline partnerships, or pricing and revenue management, Embark has over 100 years of experience to take airlines to new heights.

Contact our team via phone or email and we would be happy to discuss how we can work together to support your needs.

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