

# Transitioning from PSS to OOSD

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## Market Landscape: PSS vs OOSD

Most airlines have paused their digital and distribution projects to focus on operational performance. Yet, behind the scenes, a profound shift is accelerating: the transition from PSS (Passenger Service Systems) to the emerging concepts of OOSD (Offer, Order, Settle, Deliver).

At **KIVECA**, working alongside small, medium, and large airlines, we observe that this transition is no longer theoretical. It has begun, but it is progressing unevenly and raises many challenges.

### Large Airlines: cautious pioneers

Major carriers have initiated the first transition projects. Their approach is often **progressive and modular**, with workstreams centered on Offer Management or Order Management. Leading IT vendors have clearly positioned themselves: historical PSS providers have launched transition roadmaps, while new entrants (often coming from pricing optimization or retailing) are seeking to gain market share.

However, large-scale projects remain weakened by a central issue: the coexistence between emerging OOSD modules and the application ecosystems already developed around PSS. These applications—often built internally or with digital startups (enhanced CRMs, dynamic pricing engines, disruption management tools, ancillary retailing platforms, etc.)—have become critical. Their integration into a future OOSD framework is not yet guaranteed, creating a major functional risk.

### Smaller Airlines: cautious but active on the periphery

At the other end of the market, smaller carriers adopt a different stance. They are not embarking on core system transformations, which are perceived as too heavy and risky in the short term. Instead, **they are highly active in adding peripheral solutions around their PSS**: CRM modules, multi-channel pricing tools, digital retailing or customer experience platforms.

This movement, less visible, is nonetheless significant. By strengthening their digital periphery, these carriers create a PSS+ ecosystem that will later support their OOSD transition... but in the meantime, it also increases their technical debt and makes their IT landscape more complex.

### Vendors: ambition meets limitations

IT providers today fall into three categories:

- **Historical PSS players**, who have engaged in OOSD roadmaps but move cautiously, seeking to protect their installed base.
- **Specialized new entrants**, coming from merchandising, pricing optimization, or order management, who cover part of the spectrum (Offer or Order) but not yet the whole.

- **Vertical retailing vendors**, who struggle to break through due to the complexity and inertia of existing systems.

While intentions are clear, reality remains fragmented. No vendor today offers a complete OOSD suite covering all retailing practices, leaving airlines with partial choices that are often difficult to compare.

### A market in transition... but high-risk

In short, the PSS-to-OOSD transition is underway but progressing slowly and unevenly. Large carriers are experimenting but remain unsure about decommissioning the complementary systems they have built. Smaller operators prefer to delay the shift while multiplying add-ons. Vendors move forward, but with incomplete and sometimes unrealistic roadmaps.

**As a result**, the market faces a zone of high uncertainty and elevated risks:

- unclear functional scope,
- complex and costly integrations,
- shortage of skilled specialists to deliver projects of this scale.

This is why **a clearer vision of the OOSD target, and a better-structured transition methodology** are becoming critical to avoid fragmented, costly, and disappointing projects.

### OOSD: A Moving Target, Broader Than PSS

The transition from PSS to OOSD should not be seen as a mechanical switch from an old standard to a new one. It is a deep transformation, whose scope goes far beyond the traditional perimeter of the PSS.

### A trajectory unique to each airline

Each airline approaches the transition from a unique starting point, linked to its digital maturity and the application ecosystem built around its PSS.

Large carriers have already developed advanced peripheral solutions: event platforms, enriched CRMs, dynamic pricing, disruption management tools, alliance integrations.

Smaller carriers often rely on more ad hoc solutions focused on customer experience or digital distribution, which complement their PSS but also increase their technical debt.

This diversity makes a one-size-fits-all approach unrealistic. The OOSD target will not be the same for everyone—it must integrate the assets and investments already made around existing PSS.

### A constantly evolving target

While the concepts (Offer Management, Order Lifecycle, Settle, Deliver) are now widely shared, their implementation remains heterogeneous and incomplete:

Vendors focus on specific blocks (Offer or Order) without yet covering the full spectrum.

Airlines continue to develop their own complementary modules, which remain indispensable.

Use cases evolve rapidly, driven by passenger expectations (personalization, omnichannel, disruption management) and new technologies (AI, automation, real-time APIs).

**The risk is to underestimate the scope of the target: an OOSD limited to replacing the PSS core will not be sufficient. It must also integrate and rationalize practices already deployed around PSS.**

## Illustrative use cases

Several examples highlight how the OOSD scope extends beyond that of PSS:

- Ancillary sales at the airport: currently managed by ad hoc modules, but ideally to be integrated into OOSD event-driven logic (Offer + Order).
- Omnichannel with persistent shopping carts: a strong passenger expectation, impossible under current PSS, but which must become an OOSD cornerstone.
- Disruption re-accommodation: airlines have already developed sophisticated event-driven logics to handle delays and cancellations; these must be natively integrated into the OOSD order lifecycle.

## The risk of disappointment if scope is misdefined

**If the industry treats OOSD as a simple functional replacement of PSS, it risks major disappointment:**

- incomplete projects that fail to simplify the IT landscape,
- persistence of multiple parallel systems,
- greater complexity rather than simplification.

A realistic vision must recognize OOSD as a broader framework, encompassing both the historical PSS functions and the many digital innovations developed around them.

## Securing the Transition: Recommendations for Airlines, Vendors, and Consultants

Moving from **PSS+** (PSS with peripheral add-ons) to a standardized OOSD target is complex. Without a shared framework and clear vision, projects risk being fragmented, costly, and unfinished.

At **KIVECA**, we believe the key to a successful transition lies in a coordinated approach involving the **three main stakeholders**: airlines, OOSD vendors, and consultants.

## Recommendations for Airlines

**For those that have not yet started their transition:**

- Document new use cases already deployed around PSS: event/data platforms, CRM, retailing, disruption tools.
- Consolidate these use cases into a more structured internal architecture, including data and service governance.

- Prepare the ground for OOSD by reducing dependencies on ad hoc developments that are difficult to migrate.

**Expected result:** a more organized application landscape, easing future migration and reducing functional risks.

**For those already engaged in transition:**

- Conduct a comprehensive **gap analysis, covering the full future OOSD scope**—not just the current PSS or vendor roadmap.
- **Identify essential non-PSS applications** (CRM, pricing, digital retailing) and plan their explicit integration into the OOSD target.
- **Anticipate critical dependencies** (alliances, partners, distributors) to avoid hidden costs and delays.

**Expected result:** a more realistic and controlled transition, avoiding costly surprises mid-project.

## Recommendations for Vendors

Vendors must broaden and strengthen their offerings to reflect the realities of the field:

- **Enhance core modules with event- and rule-driven engines**, covering the full lifecycle of offers and orders.
- Extend roadmaps to include widely used post-booking practices: ancillary upselling, AI-driven personalization, enriched CRM integration, passenger experience data.
- Industrialize implementation capacity through standardized methodologies (questionnaires, solution models, modular migrations), similar to what already exists in PSS-to-PSS migrations.
- Build or leverage a **strong network of IT integrator partners** able to support airlines across diverse contexts.

**Expected result:** more robust, complete, and industrialized solutions, reducing overpromising and implementation failures.

## Recommendations for Consultants

Consulting firms (strategy, IT, procurement, integrators) play a central role in structuring and securing transitions. Their missions should include:

- **Supporting the definition of the business case:** combining strategic objectives, project segmentation, and IT simplification.
- **Designing realistic migration scenarios:**
  - “big bang” migrations (high risk, high complexity),
  - or progressive migrations by channel or module (requiring full synchronization between old and new worlds).
- **Preparing sub-projects:** detailed gap analyses, priority identification, phased planning.
- **Industrializing methodologies:** building standard project frameworks, governance models, and shared best practices.

**Expected result:** a more standardized and replicable transition framework, helping the market gain maturity and airlines avoid the pitfalls of improvised projects.

## A Shared Responsibility

In summary, the success of the PSS-to-OOSD transition relies on **a shared responsibility**:

- Airlines must prepare and document their application landscapes.
- Vendors must strengthen and complete their solutions.
- Consultants must structure and industrialize transition methodologies.

Only through this joint approach can the industry turn a risky transition into an **opportunity for simplification and value creation**.

## Conclusion

The transition from PSS to OOSD is now an unavoidable reality for the airline industry. It is neither simple nor linear. It resembles a ridge path, where each airline must navigate its legacy systems, strategic choices, and incomplete vendor roadmaps.

What was supposed to bring simplification may, without method, result in more complexity: prolonged coexistence of parallel systems, underestimated migration costs, increased dependency on integrators and vendor roadmaps.

To avoid this pitfall, three levers are essential:

- ✓ Anticipate and document: airlines must better describe current and future use cases to define a clear target.
- ✓ Broadening and strengthening vendors must go beyond Offer/Order blocks to cover the full retailing lifecycle with event- and rule-driven approaches.
- ✓ Structure and industrialize consultants must deliver repeatable frameworks, standardize practices and reduce project risks.

Only under these conditions can the PSS-to-OOSD transition deliver on its promise: transforming a fragmented, costly ecosystem into an agile, coherent, and value-creating foundation.

At **KIVECA**, drawing on our long experience in PSS migrations and our involvement in next generation retailing projects, we work with airlines, vendors, and consulting firms to build this structured framework.

Our conviction is clear: OOSD must not be just a replacement for PSS, but a strategic lever to reinvent airline retailing end-to-end.