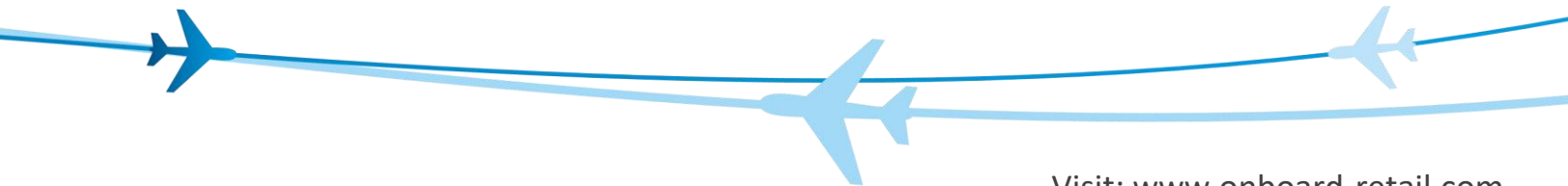




IMPLEMENTING ON-BOARD POS

A GUIDE TO 'GETTING IT RIGHT' FIRST TIME



Visit: www.onboard-retail.com
Tele: + 44 (0) 1423 871672
Email: jon.hall@onboard-retail.com



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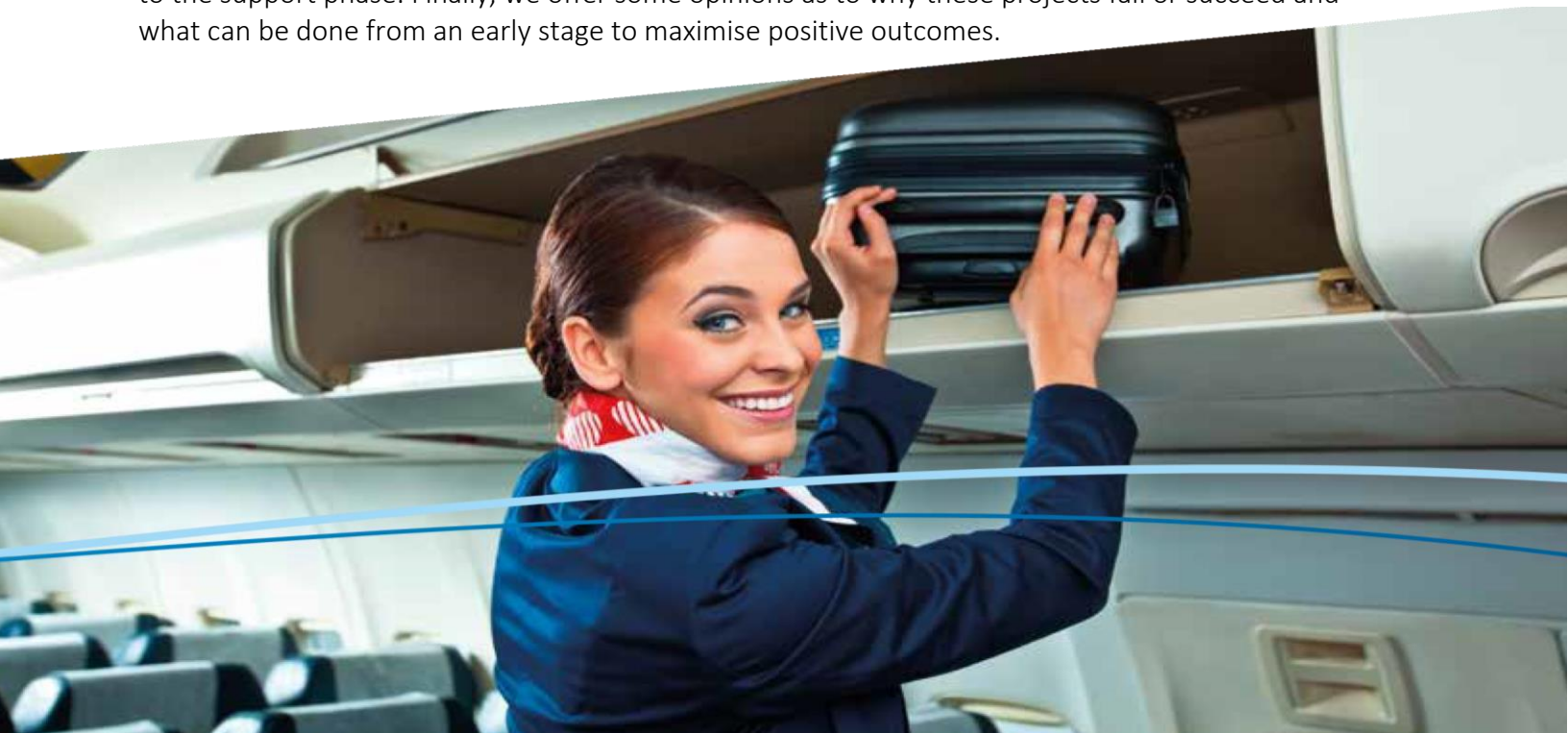
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Introduction

The trend for ticket price reductions and increasing choice of ‘paid for’ ancillaries being used to replace revenue off-set continues. This creates greater value, choice and comfort for the customer experience promoting loyalty and increasing profit margins for airlines. Thus, many airlines or their catering / duty free partners might want to invest in a modern on-board POS system. It can be exceptionally challenging for organisations to get the selection and implementation process right and to ensure that the desired outcomes can be achieved. This paper is written from the point of view of a POS technology supplier, with many years specific industry experience. Having worked with both large global airlines and small regional operators and their respective catering and duty-free partners, we’ve developed a unique perspective that is derived from our depth of experience over 30 years.

Too many times we see the airline industry select a supplier only to come to regret that decision; with projects being delayed, over budget or failing to meet expectations. How and why is this? And how can any lessons be learned and then shared more widely? Who wants to admit to making mistakes like this? We have seen senior personnel lose their positions when they have got it wrong. So, there is little appetite to talk about project failure, its causes and how to avoid it. Our experience is unique and hopefully useful to organisations investigating their next POS solutions.

Here we share some stories from our customer engagements and we aim to create a buyer’s guide that can be used as a reference, highlighting key considerations for any organisation thinking of such an implementation: from purchasing criteria, to control of implementation and ultimately go-live and entry to the support phase. Finally, we offer some opinions as to why these projects fail or succeed and what can be done from an early stage to maximise positive outcomes.





Disruption in the Marketplace

New technologies and their rate of arrival cause constant waves of disruption in the commercial aviation marketplace. Providers multiply, with some focusing in niche areas and others acquiring or investing to become one-stop-shop solution providers. Meanwhile the pace of innovation accelerates, creating greater opportunity for myriad advances in on-board connectivity, IFE content, applications and the creation of new and better sales channels and purchasing opportunities. All this whilst at the same time generating potentially greater complexity for project definition and implementation. There is no doubt that those with the clearest sense of their objectives and the best decision-making capabilities, will be the long-term winners in the on-going battle for market share and customer loyalty.

Navigation of the above complexities is the challenge presented. The bad news is that things are not going to get easier or less complex, but the good news is that it is possible to create meaningful change that can drive the airline industry to new models for success, however that may be measured.

So, how does an organisation intent on finding on-board POS solutions proceed? What is required is a filtering mechanism, a methodology to get to the right potential partners, to articulate business requirements and define the criteria for success.

Requirements Definition

This articulation is one of the hardest parts of the process for Airlines. Often, given the rate of change, IT projects can be potentially competing, and an implementation needs to be considered against a backdrop of other project commitments and contending resources.

Nevertheless, the definitions stage is highly impactful on the final result. Take time to consult widely, find out what works for the Warehouse, Catering, Crew, IT and Finance operations. Understand what works well now, and should be replicated in a new system; and what needs changing. The project can be used to drive and embed this change.

Supplier selection

This is the most important decision to affect outcomes. Interestingly there are not that many serious and capable suppliers of On-Board POS systems, with off-line payment processing capability. So, with a little homework, you are still likely to arrive at a relatively short list of potential organisations.

Above all, beware of those who are 'Jack of All Trades' and 'Master of None'. Put a team of suppliers together that, as a combination, provide excellence in their respective fields at an affordable cost.

Ask yourself: Who do we know? Who has a good track record for delivery and support? Who feels like a potential collaborative partner, rather than one who tries to be overly prescriptive?



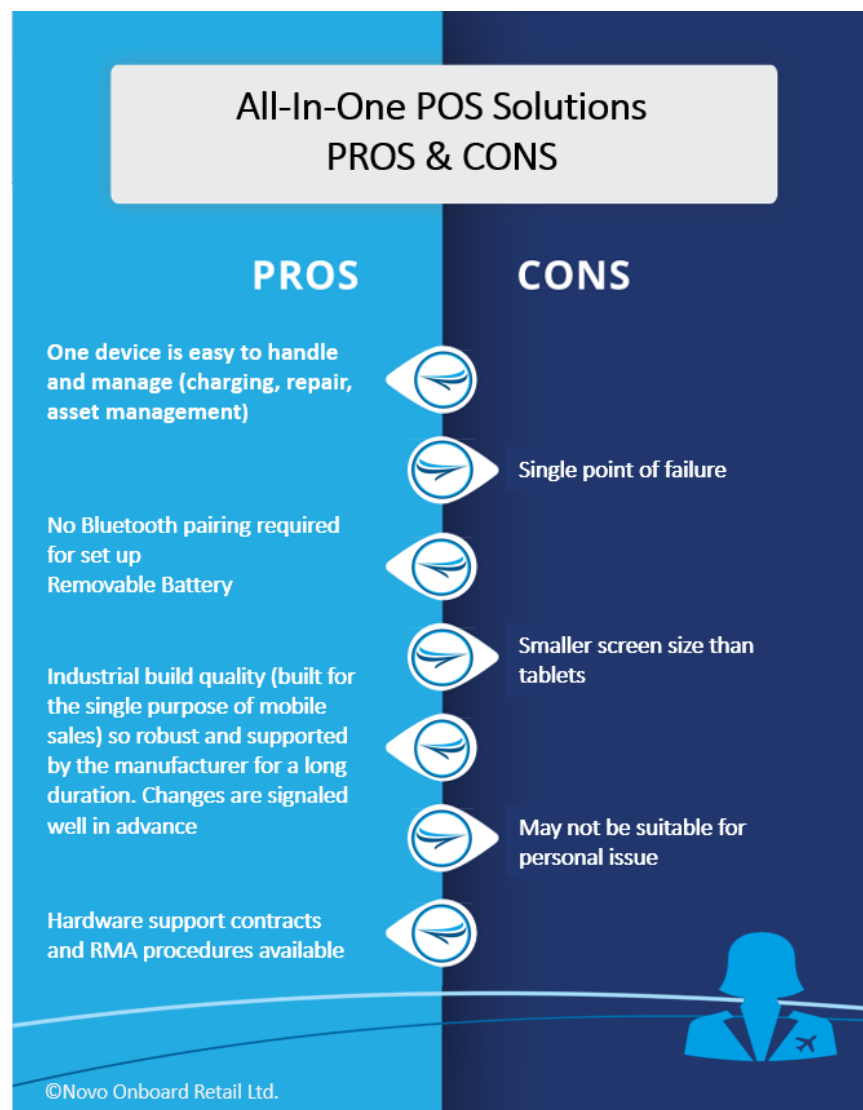


Hardware

There is a lot to consider here as there are very many options. What is important for Crew may make things more difficult in the Warehouse. The IT department will have to support the devices, so the OS choice is an important one. The devices themselves need to be managed as they operate at the periphery of the network and must therefore be secured. Finally, there is the question of longevity. For example, do you really expect a consumer tablet device to survive a three-year period in the field? If not, have you costed in replacements and considered that it might not be possible subsequently to get the same versions as per your existing estate. How might that impact your operation?

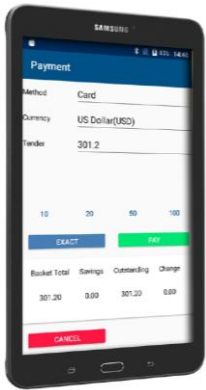
Devices and their form factors and functionality vary greatly. Here are some basics to consider:

All-in-One POS Solutions: Devices with integrated POS, card and sales receipt printer and card reader (chip and pin, mag swipe and contactless).

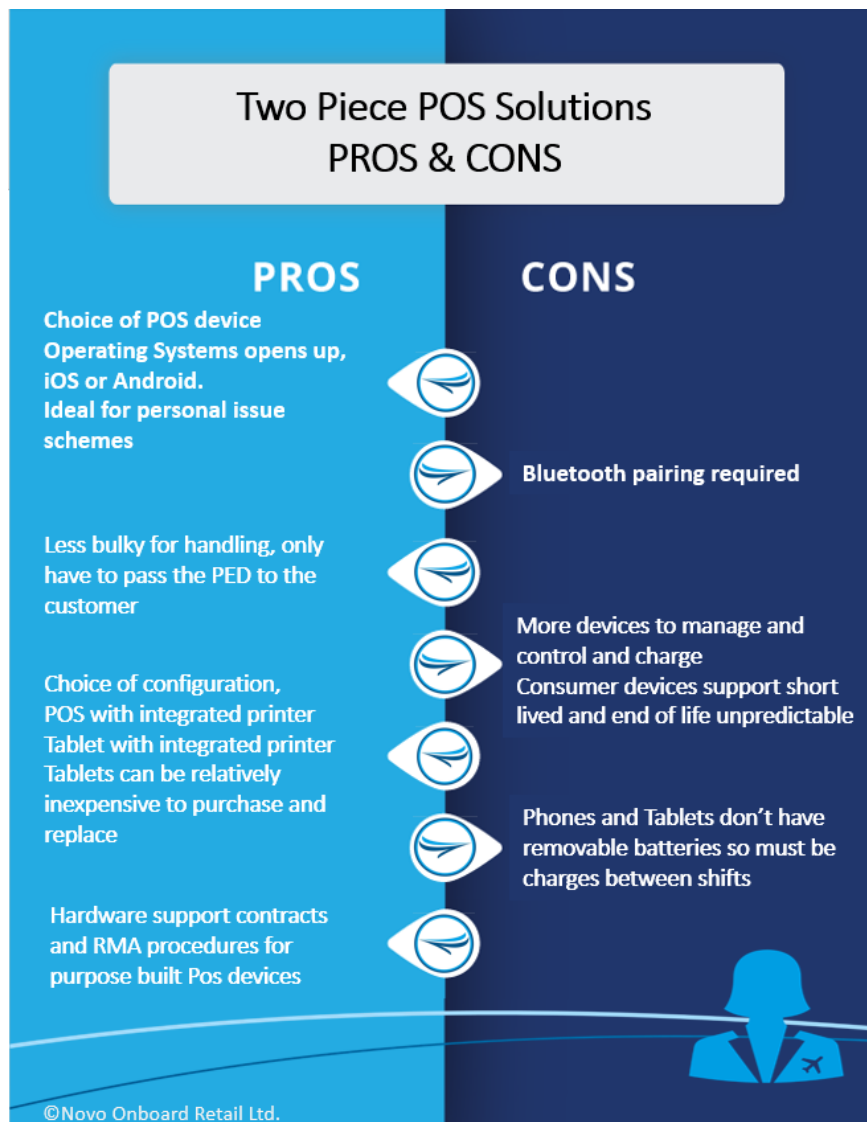




Two Piece POS Solutions: Either a POS device with integrated printer and a separate PED device, or a POS device with card payment device with an integrated printer.



Tablet / Phone & PED with Printer





Software (Mind the Gap)


It is almost inevitable that there will be some functionality desired by the airline that is either not available or works in a slightly different manner than expected (some procedures are totally unique to particular operators). Early testing will help identify what these issues might be and, if necessary, configuration or customisation can be added to the project schedule. Alternatively, you can choose to work around it. Either way, always be prepared for something that might catch you out. The key to resolution is collaborative working between all parties. Costs can be astronomic for setting up procedures to reflect the way you work. More established suppliers who have a configurable system can reduce the setup cost and time taken to deploy.

The POS software must obviously be intuitive for crew to use and cover all the essential requirements of selling. It should also be highly configurable as each airline will have needs that are unique to them. Most suppliers do the POS well, however, here are some fundamentals to check:

POS Fundamentals

- Payments,
 - Cash
 - Offline / Online Contactless
 - Offline / Online Chip & Pin
 - Offline / Online Swipe
 - Multi-currency
- Refunds
- Promotions
- Quick search / Categories
- Visibility of saleable stock on the aircraft
- Sales types (e.g. retail, crew, complimentary)
- Sales receipt
- Card payment receipt
- Seal & Stock management onboard
- Configurable to match crew workflow
- Crew - opening and closing checks
- Crew - cash & stock reconciliation
- Crew – log on/off
- Crew – passenger management

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The POS software is the core of the solution, so it should be stable and flexible to meet all operational needs. Most importantly, it needs to facilitate a quick selling process and present a professional image of the airline to the customer.

The best way to ensure any given POS application is a 'good fit' for you is to really understand and map your own processes. Workflow is the key and the POS must reflect this (either your existing workflows, or your desired new ones), otherwise the system can end up creating work rather than serving as an enabling tool. A good onboard retail partner will be able to help you with this process.



Payments

With respect to the architecture of a complete solution, this is the most difficult bridge to cross. Taking card payments in an off-line environment severely restricts your choice of payments providers. Off-line payments are different to standard, on-line payments. Special integrations and accreditations apply and will vary with different acquiring banks and according to geographical territories.

Some POS providers prescribe the payments partner and acquiring bank as part of the solution. In this case, they will be the 'Merchant of Record'. Others work with a selection of partners, perhaps with different accreditations and capabilities. Sometimes it is possible to work with payments partners and acquiring banks that the airline specifies. In both these latter cases, the caterer, duty free supplier or airline can be 'Merchant of Record', as agreed between the parties.

Take great care with this element of the project, as it will impact card fees, implementation schedule and even the hardware options that are available. In the early stages of the supplier selection process ensure you involve suppliers with these different models to confirm you understand all the details and implications surrounding this.

It may not be necessary for the POS software to have a PCI compliance (if it is not holding any passenger or card data), but the payment devices and software most certainly must meet these criteria.

Data & Reporting

You will likely be paying for access to the POS system the data it creates and captures, since it is likely that the supplier is providing a hosted solution. Therefore, it is important to understand the level of access you will be given to your data.

There are various models from different suppliers. Some offer full access to all data, perhaps presented in views and tables, that enable easy extraction to reporting tools (such as MS Excel Power BI etc.). Others offer a standard set of reports within the POS toolset. This may be fine, but equally may have hidden associated costs, with a need to purchase an additional prescribed reporting tool. Customisations to these standard reports could come with a heavy price tag!

Add this to your checklist of things to investigate and don't assume reports are straight forward, particularly if you expect to have dynamic requirements. Sit down with your prospective POS supplier and together identify the key metrics that your company requires to monitor performance and make strategic decisions with respect to your operation.

Implementation

Executive sponsorship is a must; necessary to hold all parties to account, as is appropriate representation from relevant departments. The supplier should provide a capable and experienced business analysts and project managers, and the airline should ensure to mirror this when putting together a project team.

It is imperative that a specification is evolved with well-defined goals and outputs against which the success criteria can be judged.



However, things will take longer than you expect, due to various factors. Identify the activities that are contingent on previous activities, i.e. those that are on the critical path, and carry out a detailed risk assessment. Take any appropriate mitigating action possible.

Change management is crucial and should be considered carefully. A well organised, phased project introduction to key members of Crew, IT, Finance, Purchasing and Logistics will ensure that you get their feedback and approval. This 'inclusive' process should allay the doubts and fears which always crop up with the introduction of a new system.

Key Activities

- Establishing the project team (including internal and supplier resources)
- Definitions / scoping
- Agree milestones
- Change Management
- Test
- Training
- Accept into production / go-live
- Initiation of support phase

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Support

As the project closes, the system naturally migrates to the support phase. However, this does not necessarily mean the end of intensive activity. System users will still be coming to terms with the new status quo. They will need hand holding and proactive management to ensure it gets properly embedded into the company culture; “the way we do things”.

Your supplier should have a professional responsive and informed helpdesk function. Check this at an early stage and test it during the UAT sessions.

Agree a schedule and agenda for performance and issue review.

Acceptance of go-live or phase 1 of the delivery might be the trigger to commence on the next phase and any momentum needs to be maintained. All parties can be getting fatigued at this stage. It is therefore important that there is sufficient commercial incentive for the supplier to remain focused. If a phased delivery has been agreed, ensure that the payment schedule has been designed to reflect a commitment to continued engagement and project completion. Additional things to consider are:

- Time zones (where are your operations based vs. where your suppliers have their support functions).
- Working days. Do you share the same working week and holiday periods etc.



Hardware Support

Consider what happens if you need hardware repairing or replacing. Consumer devices are probably not worth repairing, so future budget should be allocated for replacement and reconfiguration.

With industrial devices it is possible to get support contracts, where you can avail of services like hot swaps and have them pre-configured before they arrive back into circulation.

Most suppliers will rely on their hardware partners for this service. We have a '**Gold Stock**' service support model where we hold pre-configured stock, which in the event of a device failing, a replacement can be shipped the same day. The model has the advantage that airlines can outsource the repair requirements with all costs committed as part of the initial project and therefore, the real 'total cost of ownership' is transparent from the outset. You also have a single point of contact for software & hardware triage (It is not always clear if a fault is hardware or software related). Mobile device management (MDM) is included within this arrangement, so any issues that arise in the field can be quickly diagnosed and where possible rectified remotely, without having to return the terminal to base. MDM also allows for software updates to be rolled out without the need to remove the devices from service.





Purchasing Process

All organisations purchase IT projects in a different manner. Of course, there are many similarities in process, with many common elements, but not all elements are common to all organisations. A proficient and ethical supplier will quickly work out what is important for your organisation, i.e. what are your key purchasing criteria. And of course, whether their technology can meet your needs or not.

We have defined some purchasing types; primarily to help us understand the sorts of engagements we are entering into, and this helps inform our strategic approach to how we best help our customers. Perhaps you can see your own organisation here?

Quick Implementation (Out of the box)

We have been asked “How quickly can you deliver? Because we need a system live in a number of weeks.” This is surprisingly common and might be as a result of a new catering contract being awarded, or new routes being added to an operation.

What is important here is to distinguish between go-live and the end state of the completed project. Sometimes go-live can be achieved with a cut down, simplified system, with no or limited integration to other systems. So, in this instance, the scope is tightly controlled. But it is important to keep an eye on requirements for next phases of delivery and to have confidence that the supplier can not only deliver quickly, but can do so whilst introducing a system that is flexible and open enough to meet the later requirements.

In this case it is common to find decisions being made quickly, under pressure and over time, and may be reversed as new requirements or more details come to light. Therefore, one of the most important considerations when going for a quick roll out, is to satisfy yourselves that the supplier will have a strong project governance capability, not only to control their own assignments, but also yours. There will be supplier activities that are contingent on your collaboration and expediency. Be prepared to hear “no” or “not in this phase” from your supplier, or else you may risk your go-live timescales.

Certainly, a phased approach to roll-out can be a useful consideration. It limits the complexity, associated risk and possible impacts as well as breaking the project into clear milestones on which progress can be measured. Additionally, it should mean that you can get the fundamentals in place quite quickly, i.e. being able to sell on-board and capture the outputs of stock, cash and card reconciliations.

A high degree of trust in your supplier is required to make a success of this approach. If that is not there, then slow down. ‘Delayed but effective’ project delivery is better than ‘earlier but not sufficiently functional’. Crew will be quick to reject a system that doesn’t work well, and you will never get another first chance to get it right.

Finally, this purchasing type is often driven from high up in an organisation, where senior managers have made personal or contractual commitments to external stakeholders to get a solution in place. As a result, IT, Warehouse, Catering, Finance and Project teams all engage well since they have direct visibility within the management team. Crew however are often not well represented at this stage. Management, having defined what is necessary then prescribe that crew will have to use the system. Without early and effective crew representation in the project stage, expect problems. You are then in a position of requiring compliance, rather using it as an opportunity to promote it as making their job easier, for example. Ignore Crew at your peril.



Considered Implementation (Detailed project-controlled approach)

This is where you should be able to rely on your chosen suppliers to support you through the definition process. This detailed engagement is the best kind from the supplier perspective. They have an opportunity to craft a solution that maps their technology on to your current or desired business processes. A good supplier will challenge your existing or perceived desirable processes and help you come to good decisions about the best implementation for your business. Openness and collaborative approaches from all sides (if not a little patience) will help with project definition, control of scope and implementation.

The effort from the supplier at this stage is significant and should not be underestimated. We have introduced a standalone charge for this element. It means we can allocate the right resource to producing a final scoping analysis, specification document and defined commercials for the remainder of the project. If the project progresses to the next stage, we off-set this cost against future deliverables. Therefore, for a small commercial up-front commitment there is a good result and a sound platform for all parties to move things forward.

It is well recognised that RFPs are potentially counter-productive in this regard. They create a prescriptive approach. To engage meaningfully with suppliers requires a substantial input from the airline, so it largely gets reduced to a spreadsheet interaction. This often gives suppliers little room to develop a detailed understanding of your requirements, or to discuss what they know to be important considerations, or to demonstrate any unique values and experiences to help you achieve the best solution. However, the creation of the documentation that describes the detailed operational processes, objectives and business requirements should not be overlooked.

That said, once a short list is created, and a good and fair selection process followed, you must stop and check that your decision criteria are sound and that you remain confident that they are correct. This may change through the process of engagement and you should remain open to this.

There is a great deal of talk about risk management. What is often neglected is opportunity management. There are very tangible gains to be had by adopting this filter and a good supplier can help you navigate potential pitfalls and hurdles, describe limitations and future capabilities. All of which is important in steering you towards success. Finally, ensure that all relevant departments have representation at all relevant stages. This is particularly important after supplier selection. Broad collaboration reduces the dependence on assumptions and will refine the end solution so that it is the best possible fit for all.

Want It All

End-to-end customer engagement and increased revenues is the panacea afforded by technology. It can be that purchasers foresee multiple business improvement benefits from a new POS system. You might expect interfaces to many different systems, such as ERP, Crew management, airlines own retail apps, IFE etc. Today, all of this is technically possible, but check the risks associated with adding too many layers of complexity to a project and quantify the material gain.

It is our experience that large airlines, with substantial IT Departments and good depth of experience, can demonstrate the sophistication to make these very large projects happen. But even then, it is a difficult process and can consume exponential time and resource to meet originally stated expectations. But for the medium to smaller airlines, we suggest that this is the wrong method. A 'bite sized' approach will work better, reduce risk and have a greater likelihood of a positive outcome. By all means, ensure the POS system selected is capable of interfacing with other links in the chain, but you may want to consider running them as separate, serial projects.



Want It Simple

We have enquiries where purchasers specify that they want a super simple system. Virtually no crew interaction to be required, no checks and no stock movements allowed (because “it’s too slow”?) etc.

Whilst we agree simplicity is the friend of acceptance and adoption, it must not be the driver at all costs. Some level of complexity is necessary to successfully interrogate behaviours, processes, fraud prevention, cash and stock reconciliation.

Designing a process to be simple means taking risks with other project KPI’s. Again, a good supplier can help you embrace simplicity, but ensure that there is enough rigour to the processes to ensure accuracy, value creation and its measurement.





Concessionaires Versus Airlines

Concessionaires have slightly differing requirements to airlines. Usually they are managing multiple customers and they need a high degree of flexibility to achieve this. Concessionaires require a system that can manage multiple airlines and depots and the ability attribute stock and sales to each Airline instance. Each Airline will have their own processes so the system must be capable of delivering different workflows for the POS per Airline.

Hybrid implementations are common therefore the POS system must be capable of interfacing with the Airlines ERP system. Where the Airline or Concessionaire's ERP has the capability to control all aspects of the Journey, Stock and Sales criteria, you must ensure that the onboard POS can interface directly, or as a 'pass-through', with the POS providers Back Office only managing the POS setup and work flow. Although this can result in duplication of effort and is known to be a difficult juggling act for concessionaires to maintain, a supplier whose system has been developed to cater for this eventuality can ensure that their system appears transparent in the process.

Conversely if the Airline has existing POS terminals and software, the concessionaires back office must be capable of providing compatible interfaces.

There are POS and back office systems that can manage multiple airlines through one portal - in our case the Novo system uses "Brand Settings" for each Airline -





Project Check List

- Take time to consult widely when defining requirements. Find out what does and doesn't work for all areas involved in your operation.
- Check your POS supplier's credentials. Ensure that they have a good track record for delivery and support.
- Ensure executive sponsorship is in place and that appropriate representation from each department is present within the project managed team at all relevant stages of the project.
- Make sure that your POS covers the fundamentals and is configurable. Check it has the flexibility to cover future requirements.
- Consider the requirements of all departments when selecting hardware. Make sure the technology is supported from an OS and repair perspective.
- Make sure your POS mirrors existing or desired workflows to ensure it services as an enabling tool.
- Consider your payment options thoroughly. Ensure you involve suppliers with different models to confirm you understand all the details and implications surrounding your options.
- Check what data access you will be granted plus any associated costs. Ensure these fit with your reporting requirements.
- Agree a schedule and agenda for deliverables, performance and issue review.
- Ensure there is a robust commercial agreement in place with your supplier that reflects your delivery and implementation requirements.
- Make sure that your POS supplier has a professional responsive and informed helpdesk function. Ensure this is testing during the UAT sessions.
- Collaboratively test your software with your POS supplier in the early phases of the project to highlight any issues or customisation requirements.
- Be prepared to be guided by your suppliers and heed their risk assessments.



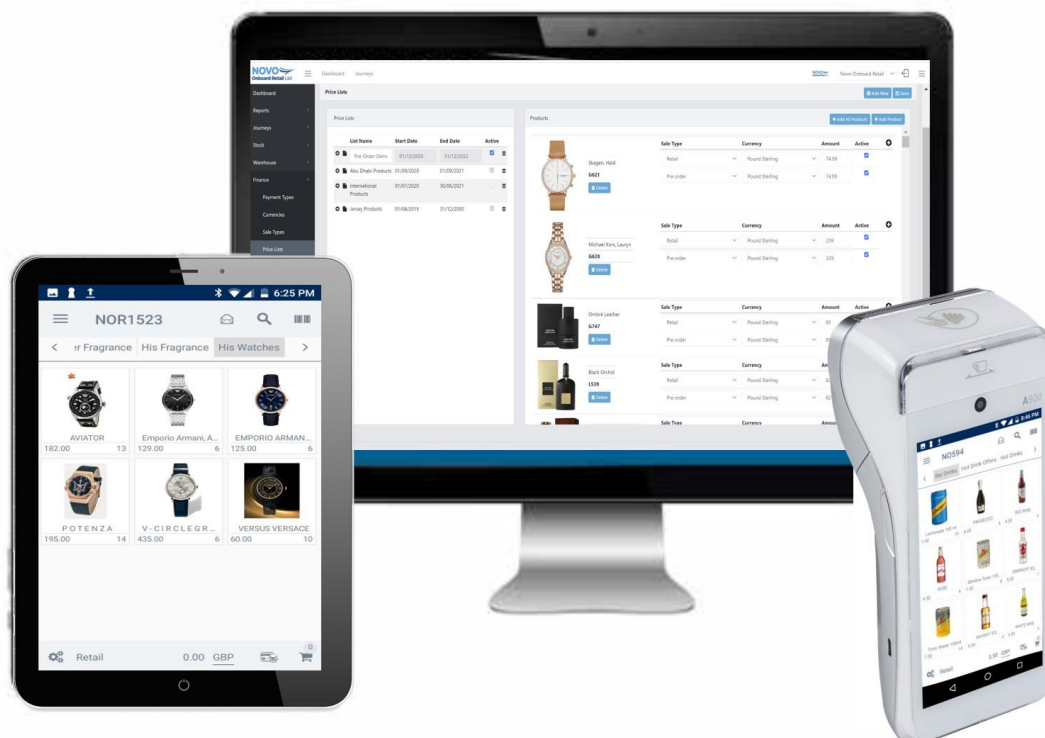


About us

Built from the ground up and utilising the experience gained with deployments all around the world, our NovoStar product suite is the leading independent onboard retail solution for the Airline industry.

“NovoStar” provides the airline industry with a software suite that facilitates the sales of inflight duty-free, catering and ancillary products. Streamlining inflight operations whatever the connectivity, we have the technology that makes on-board selling a fast, easy and personalised experience. The availability of all major payment options allows NovoStar to maximise revenue and enhance the payment experience whilst full integration with the NovoStar back office offers greater management control of all aspects of pre and post flight sales. The system is highly configurable allowing Airlines to mirror their processes and workflows without costly time-consuming bespoke developments.

If you are an existing or potential user within the airline industry our NovoStar product suite can add real value to your on-board retail processes. Please contact us for a non-committal dialogue and we will guide you through our solution portfolio.



Tel: +44 (0) 1423 871672
Email: enquiries@onboard-retail.com