

**From:** Woods, Tom <Tom.Woods@sabre.com>  
**Sent:** Friday, August 25, 2017 11:22 AM  
**To:** Celis, Rodrigo <Rodrigo.Celis@sabre.com>  
**Subject:** RE: FLX and Datalex competitive analysis  
**Attach:** Farelogix Summary 18Aug2017 1300.pptx

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Completed Farelogix analysis attached. Mike sent these over this week and will not be doing any more work on it.

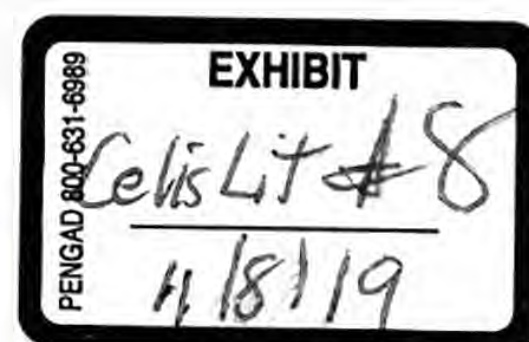
Tom

**From:** Celis, Rodrigo  
**Sent:** Friday, August 25, 2017 10:56 AM  
**To:** Woods, Tom <Tom.Woods@sabre.com>  
**Subject:** FLX and Datalex competitive analysis

Tom,  
Forgot to ask you just now about this. Do you have copies of the work that was done?

Thanks

PLAINTIFF EXHIBIT  
PX048



SABR-000027800



SHORT TITLE

## Executive Summary: Farelogix (FLX) Slow Customer Acquisition is Offset by New Shopping Products and Upselling to Existing Base

**Farelogix has made significant inroads with NDC connectivity, ancillary APIs and rules-based offer engine**

**Despite shunning industry standards early-on Farelogix has embraced IATA NDC – the company is now NDC Level 3 certified – and is seen by many carriers as an innovative thought leader**

**Unclear at this point what is fact and fiction in terms of portfolio capability, scalability and market adoption**

**While Farelogix has around 20 airlines its customer acquisition seems to have slowed recently and is mostly focused on upselling large-scale network carriers**

- Market gain is mostly driven by Farelogix NDC API, not core products
- Playing role of vocal thought leader role, driving industry direction in a way not always aligned with Sabre value creation

**Farelogix does *not* have stronger core merchandising capabilities than SabreSonic, but...**

- Farelogix does have much better overall integrated GUIs
- SabreSonic customers are confused about our retailing platform in general (many features, not monolithic, not full end to end, etc.)

**Farelogix (and Amadeus) are the most relevant threats in next generation retailing (NGR) and next generation distribution (NGD) spaces**

**WestJet plans to deploy FLX Schedule Builder and FLX Availability Calculator, which adds momentum to FLX's off-host shopping and merchandising capabilities**

# Farelogix (FLX) Successfully Pivoted from Being a GDS-Lite to Become Offer Management and Direct Connect Pipeline



"Dynamic offers, personalized real-time bundles, inventory-controlled corporate products are quickly becoming the new norm."

- Jim Davidson, CEO  
Farelogix

### Stated Goal

To create transparency in the marketplace and give airlines full content control

### Company Profile

- Founded - 1998
- Employees - ~120-175
- Headquarters - Miami, FL
- Ownership - Private Equity, VC and Angel Investors
- Funding Rounds - Sandler Capital Management, Series C, \$6M (2005)
- Revenues - ~\$25M (2015 consensus estimate)
- CEO/Senior Management - Mostly ex-Amadeus

### Product Portfolio

At the core of the product portfolio is the offer management platform, with complementary components

- FLX NDC API - allows delivery of airline's full suite of content to direct and indirect marketplace
- FLX Open Connect - make and manage bookings through various interfaces to PSS
- FLX Merchandise - provides airline-controlled merchandising and rules engine for building offers
- FLX Shop & Price - provides airline shopping, offer, and pricing engine
- FLX Availability Calculator - offers high performance availability cache independent of airline's PSS
- FLX Schedule Builder - allows airline to build and optimize schedule
- SPRK Point-of-Sale - provides a web-based travel agency point-of-sale system fully integrated with the Farelogix platform





Most Farelogix Customers Tend to Be Major Carriers With Solid Plans For Innovation in Multi-Channel Merchandising and Direct Distribution

**Typical Customer**

- Major network carriers
- Airline families / complex interline and codeshare
- In-house and/or IT partner expertise

<https://seekingalpha.com/article/4049593-amadeus-amadf-ceo-luis-maroto-q4-2016-results-earnings-call-transcript?page=1>

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## Airlines See Farelogix as Enabler of Merchandising Strategies and Direct Connect Distribution Strategies

### American Airlines

"Using direct connect technology, we can make individually tailored offers possible in real time, transparently, no matter where the customer chooses to shop. Third-party distribution channels that use American's direct connect can provide customers with the unprecedented ability to shop where they want, yet obtain the highly relevant products and pricing that one would normally expect from contacting American directly."

-- Cory Garner, Managing Director of Sales Operations and Distribution at American Airlines.

### Emirates

"With the Emirates flagship store, we now have direct access to rich content and ancillaries from Emirates, a global airline that has become increasingly more relevant to the market in China. This equates to a better consumer experience for our customers because we can now deliver highly relevant and new content that was not available through the intermediaries we previously relied on to deliver Emirates content to our consumer booking engine."

-- Wells Zheng, Vice President of Alltrip

### AIR CANADA

"We have worked with Farelogix for years and just recently began working with Routehappy. It makes sense for Air Canada to integrate both technology platforms to deliver an even greater benefit to our customers. Routehappy will help us vividly convey [the best possible experience] to all of our customers so that they can make a more informed purchase decision."

-- Keith Wallis, Director - Global Product Distribution at Air Canada

### Lufthansa

"The Lufthansa Group is a first mover in using distributive freedom via Direct Connect solutions to offer smart targeted offerings. Farelogix is a sustainable, proven, non-GDS distribution platform fulfilling the business needs of key market players and continuously developing functionalities suitable for the needs of our main customers. We are proud to extend our long-term collaboration with Farelogix to continue providing NDC-based distribution and offer differentiation in the market."

-- Xavier Lagardère, Head of Distribution at Lufthansa Group

### flydubai

"Product and service differentiation is a key part of our strategy as our network continues to grow. Integrated solutions are becoming an important part of the aviation industry, and with the FLX Merchandise engine from Farelogix, flydubai is able to offer more flexibility and choice to our passengers."

-- Ramech Venkat, CEO of flydubai

### QATAR

"I am delighted that the Qatar Airways pilot programme with Farelogix has now completed, with the roll out and implementation across the Farelogix platform. This additional level of detail showcasing Qatar Airways premium products will only enhance everyone's understanding and experience of our airline's premium products, before passengers even commence their journeys."

-- His Excellency Mr. Akbar Al Baker, Qatar Airways Group Chief Executive

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While Farelogix Customer Base Has Not Expanded Significantly the Company Continues to Expand Its Footprint with Existing Customers / Partners



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Most of Farelogix's Customers Use the NDC API and Increasingly FLX Merchandise

Customer	Model	PSS	Total PBs*	eComm PBs**	Farelogix Product	Notes
Air Canada	Network	In-house (moving to Amadeus)	34.3M	16.2M (47%)	FLX NDC API FLX Merchandise FLX Shop & Price	Integrating with Routehappy to deliver content catalog from Routehappy with dynamic pricing and rules-driven offers from FLX in a single API. Known to have evaluated SPRK Agency Desktop.
American	Network	Sabre	144.5M	49.1M (34%)	FLX NDC API FLX Open Connect FLX Merchandise FLX Shop & Price	Announced capability to sell upgraded seats on Sabre using AA Direct Connect API. AA uses FLX Merchandise for seat shopping and booking in all major GDSs – believed to also be part of AA Dynamic Fares. Uses FLX in conjunction with ITA for product catalog/shopping.
Delta	Network	In-house	143.1M	34.7M (24%)	FLX NDC API FLX Merchandise FLX Shop & Price	Signed agreement for FLX to provide direct access to Delta's content, in conjunction with FLX product catalog. Known to have evaluated SPRK Agency Desktop.
Emirates	Network	In-house	55.0M	10.5M (19%)	FLX NDC API FLX Merchandise	Established a direct connection between Emirates PMS and FLX. Known to have evaluated SPRK Agency Desktop.
Ethiopian	Network	Sabre	7.6M	0.9M (12%)	FLX NDC API	Uses XML for direct connect.
Flydubai	Hybrid	In-house	10.5M	2.6M (25%)	FLX NDC API FLX Merchandise	Completed integration with flydubai.com with FLX merchandising platform.

\* PBs from online 2016 T2RL competitive database.  
\*\* eCommerce PBs from online 2016 T2RL competitive database.



Qantas Recently Extended Its Direct Connect Partnership With Farelogix; Hawaiian Uses Both FLX and Sabre Merchandising Products

Customer	Model	PSS	Total PBs*	eComm PBs**	Farelogix Product	Notes
Hawaiian	Network	Sabre	11.1M	6.9M (62%)	FLX NDC API FLX Merchandise	XML Direct Connect API and FLX Merchandise. Hawaiian recently purchased SabreSonic Ancillary product after having FLX Merchandise for 3 years. Uses FLX for eCommerce channel and Sabre for call center, agency
Lufthansa Group (does not incl. 59.2M PBs from family)	Network	Amadeus	54.7M	16.4M (30%)	FLX NDC API FLX Open Connect FLX Merchandise FLX Shop & Price SPRK Agency Desktop	Extend tech contract for direct connect and travel agency desktop. SPRK Agency Desktop provides direct connect GUI for Lufthansa agencies. LH uses Datalex for product catalog/shopping.
Olympic Air			1.6M	unk	FLX Open Connect	Used to facilitate agent bookings, EMD processing to Altea PSS. No merchandising. Uses SiteCore for content management.
Qantas			28.2M	20.3M (72%)	FLX NDC API FLX Open Connect FLX Merchandise FLX Shop & Price	Qantas is implementing an FLX multi-product suite in support of a new Distribution Partner Platform, which most components of FLX suite Premise is offer control, merchandising flexibility and lower cost multi-channel distribution (unknown if this is flight or full ancillary shopping). Includes Routehappy to deliver content catalog.

\* PBs from online 2016 T2RL competitive database.  
\*\* eCommerce PBs from online 2016 T2RL competitive database.

# WestJet Recently Extended its FLX Solutions With FLX Schedule Builder and FLX Availability Calculator

Customer	Model	PSS	Total PBs*	eComm PBs**	Farelogix Product	Notes
Qatar	Network	Amadeus	30.0M	4.5M (15%)	FLX NDC API FLX Merchandise	Completed first stage of NDC pilot will significantly increase the volume of products available for sale by travel agents who use FLX
United	Network	HP / Shares	101.0M	20.2M (20%)	FLX NDC API FLX Merchandise FLX Shop & Price	Amadeus using United's FLX powered XML API to sell Economy Plus seats. UA uses FLX Merchandise for seat shopping and booking in all major GDSs Known to have evaluated SPRK Agency Desktop
Virgin America	Network	Sabre	8.1M	4.8M (59%)	FLX NDC API FLX Open Connect	Integrating with SeatBoost from real-time bidding for flight upgrades.
WestJet	Hybrid	Sabre	22.0M	11.0M (50%)	FLX NDC API FLX Merchandise FLX Shop & Price FLX Schedule Builder FLX Availability Calculator	In production with dynamic pricing engine for ATPCO-based fares and non-ATPCO fares managed directly on airline website. Recently added FLX advanced shopping capabilities to WestJet Direct platform with FLX Shop & Price. Additional solutions using FLX Schedule Builder (enables real-time schedules) and FLX Availability Calculator (eliminates PSS availability calls) are in development for YE2017 deployment. WestJet is currently NDC Level 2 Certified.

\* PBs from online 2016 T2RL competitive database.  
 \*\* eCommerce PBs from online 2016 T2RL competitive database.

# Farelogix Provides Next-Gen Retailing and Distribution Through Its NDC API and Open Connect Orchestration Tools

## The Farelogix Airline Commerce Gateway



### 1 FLX NDC API

- Robust delivery of an airline's full suite of content to any/all sales channels
- FLX API that pushes/receives offers and orders from multiple channels
- NDC Level 3 Certified

### Current customers / partners

Almost all FLX customers use FLX NDC API

### 2 FLX Open Connect

- PSS-agnostic direct connect connectivity with full orchestration for offer and order management, ticketing, ARC/BSP and more
- Farelogix is already connected to and compatible with most major PSS/Airline Host systems
- XML translator for EDIFACT, OTA, XML, or proprietary messaging standards

Customers – American, Lufthansa, Qantas

GDS – Amadeus Altea, Sabre Multi-Host, Worldspan, Galileo Airline Host, HP Shares, HP Atraxis, IBM RES III, Mercator/Mars, and Navitaire



Farelogix Extended Its API and Orchestration to Deliver Shopping, Pricing, Offer Management and Rules Based Merchandising

The Farelogix Airline Commerce Gateway



FLX Shop & Price

- Shopping, offer, and pricing engine designed for high volume, personalized NDC-aligned offers
- Prices offers based on airline-defined rules, FF and CRM data, and AI/Predictive analytics
- AI/Predictive analytics provided by Triometric (3<sup>rd</sup> party)
- Claims to offer "Single Source of Truth" solution, but it remains unclear how FLX delivers on this in a multi-channel environment

Current customers / partners

Air Canada, American, Delta, Lufthansa, Qantas, United Airlines, Virgin America, WestJet

FLX Merchandise

- Airline-controlled merchandising and rules engine with provides flexibility for semi-custom offers
- Gives ability to upsell, add ancillaries to flight, offer bundles / discounts, push offers following disruption
- Enterprise or cloud-based
- PSS agnostic, multi-channel
- NOT dynamic pricing as advertised, but a flexible, scalable rules engine

Air Canada, American, Delta, Emirates, Flydubai, Hawaiian, Lufthansa, Qantas, Qatar, United Airlines, Virgin America, WestJet

Hawaiian recently purchased SabreSonic Ancillary solution after having FLX product for several years

Farelogix Added Schedule Builder and Availability Calculator to Its Suite But Customer Uptake is Slow; Qantas is Thought to Be Evaluating

The Farelogix Airline Commerce Gateway



5 FLX Schedule Builder

- Claims to put “control over schedule building exclusively in control of the airline”
- Large data range processing without caching
- Stand-alone or integrated with other solutions
- Claims to enable “dynamic personalized schedule building” but lack of implementations make this difficult to verify

Current customers / partners

WestJet. Also, Qantas and Lufthansa are believed to be evaluating

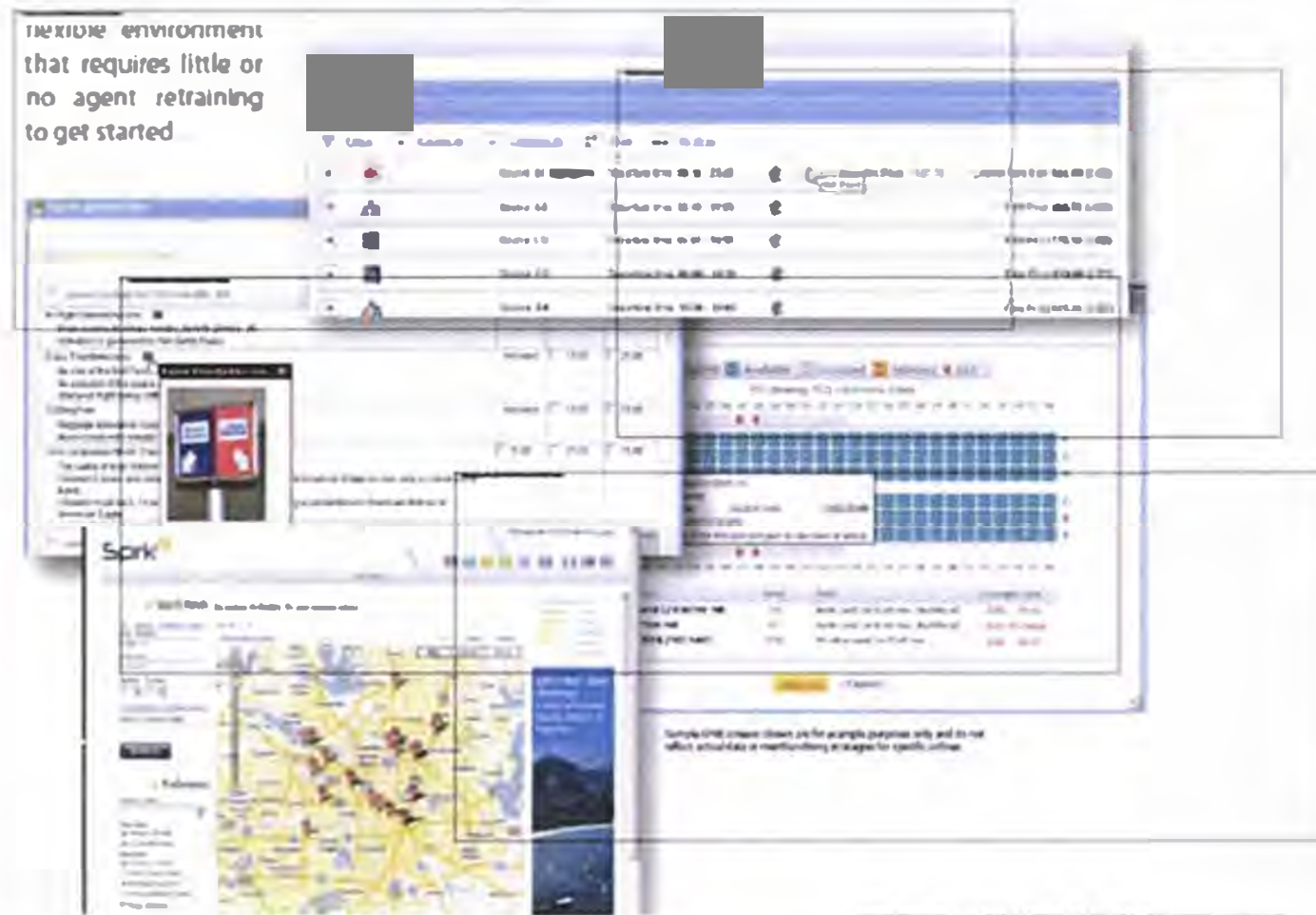
6 FLX Availability Calculator

- Claims to be “a high scalability solution that enables an airline to fully calculate its own availability, without taxing the PSS, while retaining full airline IP over its proprietary rules algorithm”
- Farelogix purports “dramatic PSS cost savings” and “optimization of search results including dynamic personalized availability searching with unlimited query capabilities”
- The solution is stand-alone or may be integrated with other solutions

WestJet. Also, Qantas and Lufthansa are believed to be evaluating

## Farelogix's SPRK Agency Desktop Provides Aggregated Supplier Content on Agency and Corporate Booking Tools; Used by Lufthansa

- **SPRK is FLX GUI used by travel agents to market offers from direct connect airlines partners (using FLX Open Connect)**
- **In other words, SPRK provides the same basic capabilities as Sabre, Amadeus and Travelport by offering aggregated supplier content on agency and corporate booking tools**
- **Partnered with Alliance Travel Network and CarTrawler to offer hotel and car content as well**



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## Sabre SWOT Compared With Farelogix

Strengths	Weaknesses
<ul style="list-style-type: none"><li>• Fully Integrated real-time pricing and fare engine</li><li>• Integration with Customer Insight, Customer Data Hub allows for fully personalized offers</li><li>• Call center application has complete feature set to handle most complex support scenarios</li><li>• Dynamic Retailer offers foundation for more robust, broader and personalized retailing capabilities</li><li>• Able to deliver offers through both the direct and indirect channels</li></ul>	<ul style="list-style-type: none"><li>• No integration with any other PSS except for SabreSonic CSS</li><li>• No fully compliant or functioning NDC solution</li><li>• Limited exposure of products through DX/DC only, which is in direct conflict with the NDC model</li><li>• Unclear marketing approach towards merchandising and retailing</li><li>• Admin and user GUIs dated, lacking modern UX and not consistent</li><li>• Time to market with retailing / merchandising solutions</li></ul>
Opportunities	Threats
<ul style="list-style-type: none"><li>• Sabre's new DX/DC products are well positioned to win some of our stolen customers</li><li>• Sabre needs to strengthen non-air ancillary capabilities to provide a complete end-to-end product</li><li>• Pan-Sabre merchandising and retailing initiatives may lead to consistent marketing and next generation retailing and next generation distribution solutions</li></ul>	<ul style="list-style-type: none"><li>• Airlines can replace parts of SabreSonic solution with FLX as it can integrate with multi-airline CRS/PSS and revenue management systems</li><li>• FLX solution poses a direct risk to SabreSonic air shopping/pricing and retail solutions</li><li>• FLX, Amadeus and others are already forming partnerships with airlines to leverage NDC capabilities</li><li>• Growing number of airlines pursuing direct connect</li></ul>

## FLX Open Connect: Booking Management Services and Orchestration















Functionality					Comments
Customizable point-of-sale		FLX Open Connect		DC/DX	Sabre has a better solution as airlines can customize themselves at no cost. FLX prefers to team with 3rd parties to offer front-end customization and integration.
Full content access across all channels		FLX Open Connect		DC/DX, Interact Interface, Web Services	FLX NDC API allows distribution of full content to airline kiosks, call centers, website, mobile. Can be implemented directly with agencies, OTAs, and corporate booking tools, or via any GOS.
Full services orchestration for offer and order management		FLX Open Connect (orchestration engine)		DC/DX, Dynamic Retailer	
Connectivity to and compatibility with most major PSS/airline host systems		FLX Open Connect (connectivity protocols)		SabreSonic suite in general	FLX Open Connect provides connection to all major PSS; Sabre has no offering
XML translator for EDIFACT, OTA, XML, or proprietary messaging standards		FLX Open Connect (XML translator)		SabreSonic suite in general	Sabre is capable of message handling and translation, but varies by product
Booking and ticketing management		FLX Open Connect		DC/DX, Res, Ticketing, Web Services	SabreSonic offers comprehensive booking and ticketing functionality, which can be exposed through multiple channels.
Settlement and reconciliation		FLX Open Connect		DC/DX, Res, Ticketing, Payment Solutions, Web Services	SabreSonic offers comprehensive booking and ticketing functionality, which can be exposed through multiple channels.

FLX NDC API: Omni-Channel Content Connectivity / Distribution Via API













Functionality					Comments
NDC Level 3 Certified		FLX NDC API		DC/DX, Res, Ticketing, Web Services	Despite shunning industry standards early on, FLX is now NDC Level 3 Certified.
NDC Merchandising API (seat)		FLX NDC API		DC/DX, Res, Ticketing, Merchandising, Web Services	FLX is in production with all major GDSs to sell AA and UA seats – includes seat shopping and booking service. AS offers integration only through TN.
NDC Merchandising (non-seat)		FLX NDC API			FLX states they have NDC schema today available, we do not see any carriers using today in GDS, possible agency direct, no visibility.
NDC Air Shopping		FLX NDC API			Sabre TN currently working with AA to integrate AA fares from Google through FLX Air Shopping API, this will allow AA to give personalized flight prices vs. using the standard ATPCO published fare.
Merchandising and Shopping API (Non-NDC)		FLX NDC API		DC/DX, Res, Ticketing, Merchandising, Web Services	FLX has been supporting direct connect agency model with an API before NDC became the standard API. Sabre has much more robust Sabre APIs but not NDC standard.



FLX Merchandise: Merchandising Platform

Functionality	 FARELOGIX		 Sabre		Comments
Multi-channel ready w/web services support for rapid, easy integration		FLX Merchandise		DC/DX, Res, Ticketing, Web Services	FLX merchandising platform is PSS agnostic. Both FLX and SabreSonic advanced retailing do not make all content consistently available across all channels.
Airline-controlled merchandising rules		FLX Merchandise		DC/DX, SabreSonic Ancillary, Dynamic Retailer	While both products require customization, FLX core capabilities in APIs enable faster deployment into multiple sales channels.
Intuitive drag-and-drop user interface to file ancillary items with price and rules		FLX Merchandise		DC/DX, SabreSonic Ancillary, Dynamic Retailer	FLX GUI is more intuitive and is superior to SabreSonic for ancillary filing, rules creation and administration.
Baggage ancillary capability		FLX Merchandise		DC/DX, SabreSonic Ancillary, Dynamic Retailer	SabreSonic Baggage Calculator supports personalized bag calculation and cost at check in. FLX does not have this capability.
Seat ancillary capability		FLX Merchandise		DC/DX, SabreSonic Ancillary, Dynamic Retailer	FLX offers filing, inventory and markup of seats. SabreSonic Ancillary combined with Dynamic Retailer and inventory could surpass FLX but is not fully available.
Dynamic pricing		FLX Merchandise		DC/DX, SabreSonic Ancillary, Dynamic Retailer	FLX claims to offer dynamic pricing/retail but the merchandising engine uses business rules, rather than being completely dynamic and personalized.

FLX Shop & Price: Shopping, Pricing and Offer Engine







Functionality					Comments
NDC-aligned airline shopping, offer, and pricing engine		FLX Shop & Price, FLX Merchandise		Res, Core Shopping, Pricing	FLX Shopping, offer, and pricing engine designed for high volume, personalized NDC-aligned offers.
Faring and pricing including traditional ATPCO published fares		FLX Shop & Price, FLX Merchandise		Res, Core Shopping, Pricing	FLX supports all standard ATPCO faring/pricing options, including ATPCO CAT 31/33 fares, private fares, fare families. Includes integrated tax engine, fee support (YQ/ YR, OB fees).
Comprehensive merchandising of seats, ancillaries, branded fares, bundles		FLX Shop & Price, FLX Merchandise		DC/DX, SabreSonic Ancillary, Dynamic Retailer	FLX claims to price offers based on airline-defined rules including frequent flyer tier, CRM data and AI / predictive analytics (Triometric). Supports ATPCO fares and non-ATPCO merchandising and offers richer content.
Affinity (point of interest) and attribute (merchandising) driven shopping		FLX Shop & Price, FLX Merchandise		Res, Core Shopping, Pricing, FQTV, Dynamic Retailer	Not known if or how FLX addresses this claim. SabreSonic Dynamic Retailer is known to offer more substantial levels of shopping.
Scalable, cacheless operation		FLX Shop & Price, FLX Merchandise		Core Shopping, SabreSonic Ancillary, Dynamic Retailer	FLX claims to build offer in real-time with unlimited look-to-book through a linearly scalable model - but all remains to be verified.

FLX Schedule Builder: Airline Schedule Construction Solution













Functionality					Comments
Airline controlled, real-time schedule		FLX Schedule Builder		Res, Schedule Manager	Claims to reduce OAG lag time. FLX claims are not yet possible to verify due to lack of implementations. WestJet plans to deploy by YE2017.
Build, use and promote optimal schedule based on most profitable connections and/or routes		FLX Schedule Builder		Res, Schedule Manager	Claims to increase the number of O&D combinations returned. FLX claims are not yet possible to verify due to lack of implementations. WestJet plans to deploy by YE2017.
Dynamic personalized schedule building		FLX Schedule Builder		Res, Schedule Manager	FLX claims are not yet possible to verify due to lack of implementations. WestJet plans to deploy by YE2017.
Large date range processing, without taxing PSS or other system, point of interest and merchandising-driven schedules		FLX Schedule Builder		Res, Schedule Manager	FLX claims are not yet possible to verify due to lack of implementations. WestJet plans to deploy by YE2017.



FLX Availability Calculator: Availability Calculation From Various Sources

Functionality			Comments
Calculate availability through variety of sources without taxing airline PSS / inventory or other 3 <sup>rd</sup> party system	FLX Availability Calculator	 Res, Inventory (Leg/Seg, O&D)	Claims to eliminate inventory availability calls to host PSS. FLX claims are not yet possible to verify due to lack of implementations. WestJet plans to deploy by YE2017.
Control of availability / inventory rules	FLX Availability Calculator	 Res, Inventory (Leg/Seg, O&D)	FLX claims support for O&D, journey controls and slice-and-dice for some markets (e.g. US domestic). Claims support for flexible rules management including availability count based on weighting and ranking. Claims are not possible to verify due to lack of implementations.
Scalable, high-performance availability search with unlimited query capability	FLX Availability Calculator	 Res, Inventory (Leg/Seg, O&D)	Claims to reduce response time and increase O&D result set. FLX claims are not yet possible to verify due to lack of implementations. WestJet plans to deploy by YE2017.
Standalone or integrated with other solutions	FLX Availability Calculator	 Res, Inventory (Leg/Seg, O&D)	Solution is available as stand-alone (includes FLX Schedule Builder) or as integrated solution with other FLX components. Claims are not possible to verify due to lack of implementations.

# FLX General Considerations: GUI, Implementation, Metrics, Release Management Practices

Functionality					Comments
Integrated GUI across solution components		FLX platform and solutions			FLX provides a common GUI for creating and configuring offers in FLX Shop & Price, FLX Merchandise, FLX Schedule Builder, and FLX Availability Calculator. GUIs share common characteristics, modern UX and are generally more functional.
Platform openness		FLX platform and solutions			FLX runs on commodity hardware and offers airline self-hosting option (for select components).
Ease of implementation, customization		FLX platform, practices			FLX core capabilities in APIs enable faster deployment into multiple sales channels. Customers generally report faster time to market than typical PSS it providers.
Platform analytics and metrics		FLX platform, practices			FLX product analytics and dashboard metrics capabilities are not known at this time.
Release management practices		FLX platform, practices			Customers generally report faster time to market with new functionality and release cycles than typical PSS it providers.
IATA One Order capabilities		FLX platform, practices			FLX is believed to be able to support One Order Schemas in 4Q2017. Farelogix participates in IATA PDMG WG.

# FARELOGIX COMPETITIVE ASSESSMENT

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Appendix





Farelogix Air Commerce Gateway Product Suite



FLX Merchandising Solution Creates Bundles, Pushes New Offers and Provides Ancillary Upsell Opportunities

Recovery Offer Solution



- Pushes alternative offers when a disruption occurs
- United currently uses this solution today

Corporate Bundles Solution



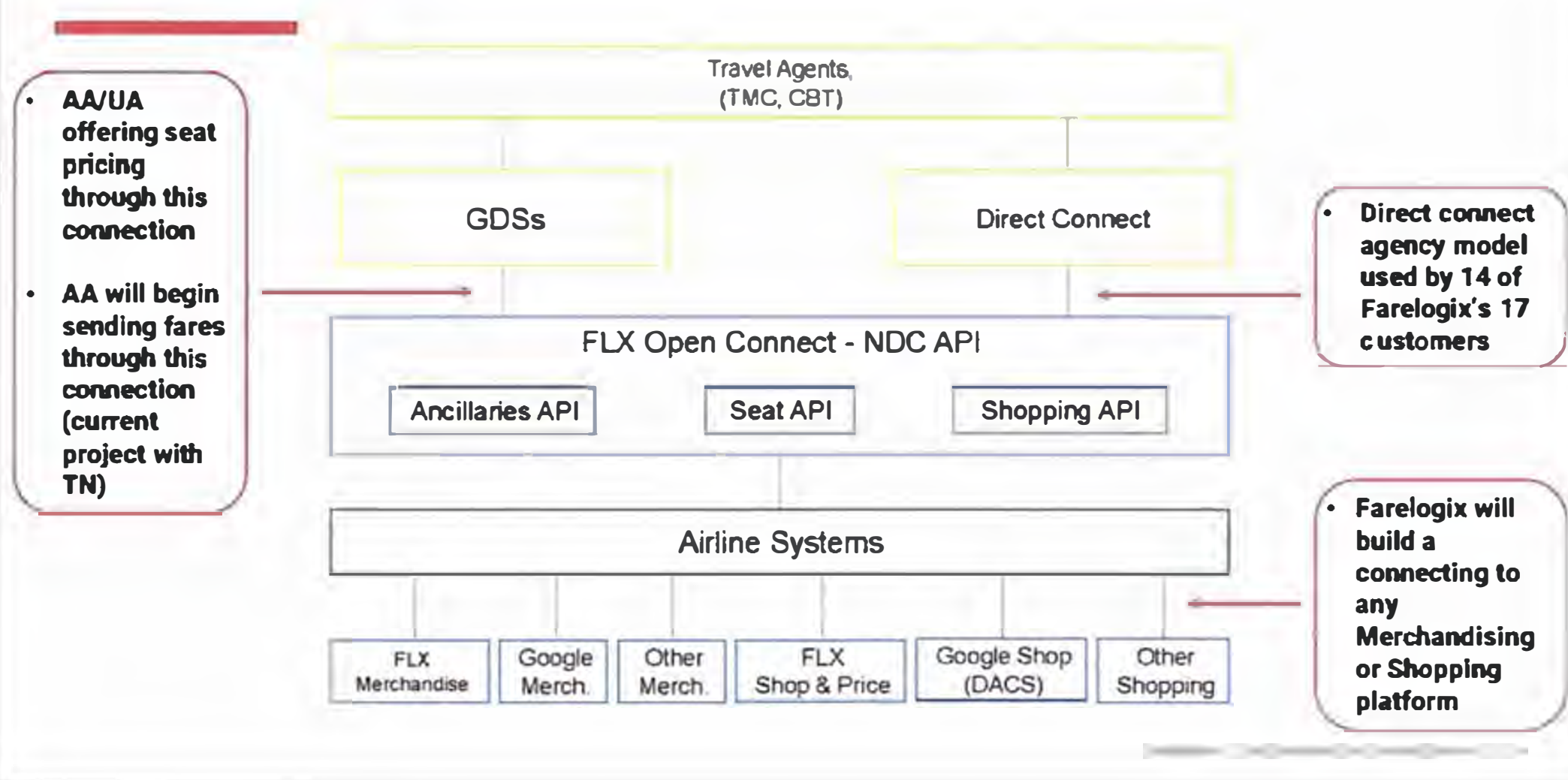
- Corporate bundles can add services or discounts to the price based on airline rules

Ancillaries Solution



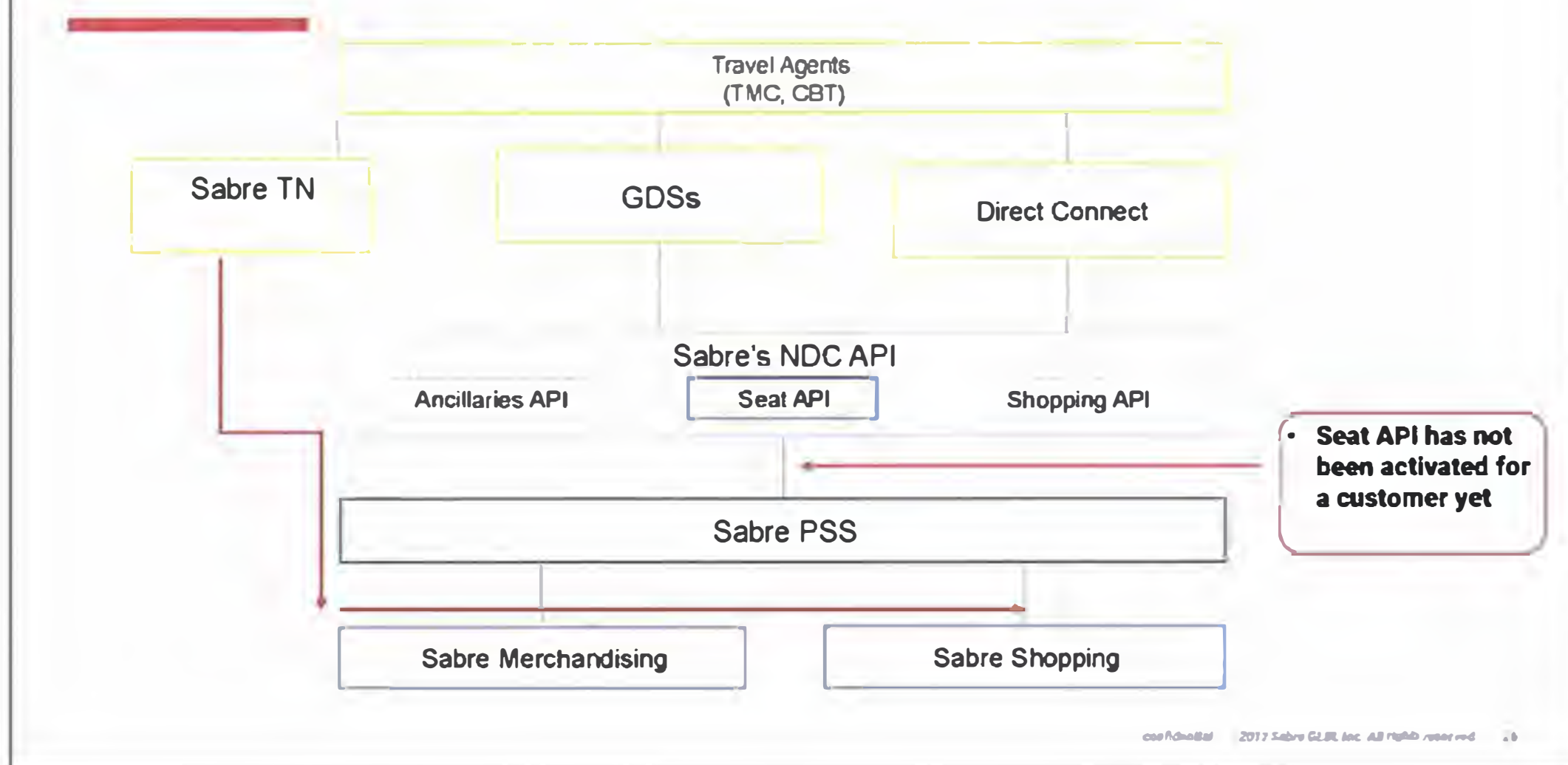
- Provides the ability to easily upsell and add ancillaries to a flight

## Farelogix NDC Marketecture





## Sabre NDC Marketecture



Farelogix Products Are Competitive to Sabre's AS Solutions But Leave Opportunity For Us to Leapfrog Them

