

Economic Analysis of Sabre's Proposed Acquisition of Farelogix

Professor Kevin M. Murphy, Ph.D.

Summary Of Conclusions

- No competitive concerns from the merger
- Sabre GDS and FLX OC are not horizontal competitors
- The proposed transaction is a vertical merger
- The merged firm will have strong incentives to innovate and compete
- Professor Nevo's market definition and competitive effects analyses are flawed and uninformative

Sabre And Farelogix Are Not Horizontal Competitors

- Sabre GDS distributes travel products via a two-sided transaction platform with many airline customers and many travel agency customers
- Farelogix provides IT services to airlines
 - FLX OC is an input that airlines can use to facilitate content distribution through various pathways
- Sabre delivers travel agency customers and travelers to airlines; Farelogix does not

Sabre And Farelogix Are Not Horizontal Competitors

	<u>Sabre GDS</u>	<u>FLX OC</u>
Relevant Product	Travel distribution platform	Airline IT services (NDC API)
Relevant Geography	At least as broad as the U.S.	Worldwide
Two-Sided or One-Sided	Two-sided transaction platform	One-sided (airlines)
Customers	Travel suppliers (e.g., airlines) Travel agencies	Airlines
Stage of Travel Supply	Downstream	Upstream
Competitive Constraints	Rival GDSs (Amadeus, Travelport) Airline.com	Airline IT departments Other NDC API providers

Sabre GDS Is A Two-Sided Transaction Platform That Competes In The Supply Of Air Travel Distribution Services

- Sabre's platform provides a broad range of valuable services to both travel agencies and airlines
- Sabre's values to the two sides are interdependent
 - A primary value to agencies is access to extensive airline content, which Sabre normalizes and aggregates to enable comparison shopping
 - Primary value to airlines is access to an extensive network of agencies – Sabre delivers agency customers to airlines

The GDSs Are Highly Efficient, Two-Sided Platforms



Kurt
EKERT
CWT

"Technically, [what] the GDSs do is akin to what a Bloomberg does. So if you are in the financial services industry, and on your desktop you have the ability to access a litany of disparate data in an integrated format, the GDS does the same thing for us. So they go out and they basically go and procure a content technically from thousands and thousands of travel suppliers. They bring that together in milli-second response, search response time."

Trial Tr. 1187:22-1188:5



Rose
STRATFORD
BCD Travel

"I mean, in no other industry can you start in a market, ... distribute your product globally in seconds and be able to sell that product globally in seconds, be distributed to every travel agency around the globe. In no industry can you do that. . . . Airlines are pretty fortunate to have that kind of distribution capability to be able to market their product."

Trial Tr. 1241:11-15, 18-19

Airline Distribution Channels – U.S. Passengers (2018)



Sabre GDS's Primary Competitive Constraints

- Rival GDSs – Sabre competes with Amadeus and Travelport for travel agency customers
- Airline.com – Competitive pressure on Sabre booking fee due to airline's ability to induce switching to the direct channel (by withholding content or imposing surcharges)
 - Most important short-term competitive constraint on Sabre
 - Relevant for both TTA and OTA bookings; especially important regarding OTA bookings

Impact From Competition On Sabre GDS Pricing



Sabre Competes With Airline.com



Chris
WILDING
Sabre

"Q. Is it important that Sabre get access to content that airlines push through to their own airline.com?"

A. Yes, it's very important. ... Airline.com is one of the primary competitors that we face as a GDS."

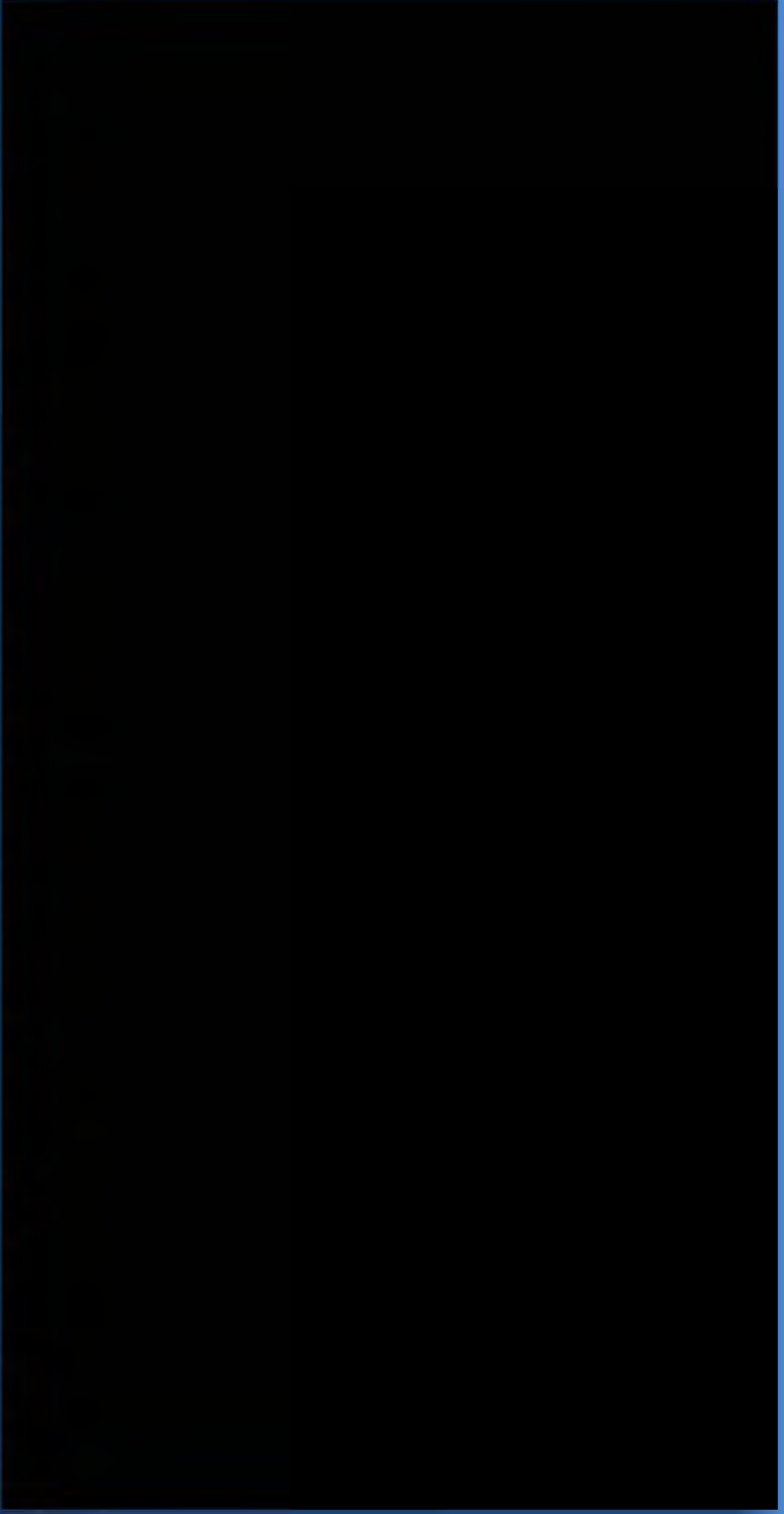
Trial Tr. 860:18-22

"Q. Does Sabre continue to see volume shift toward dot com?"

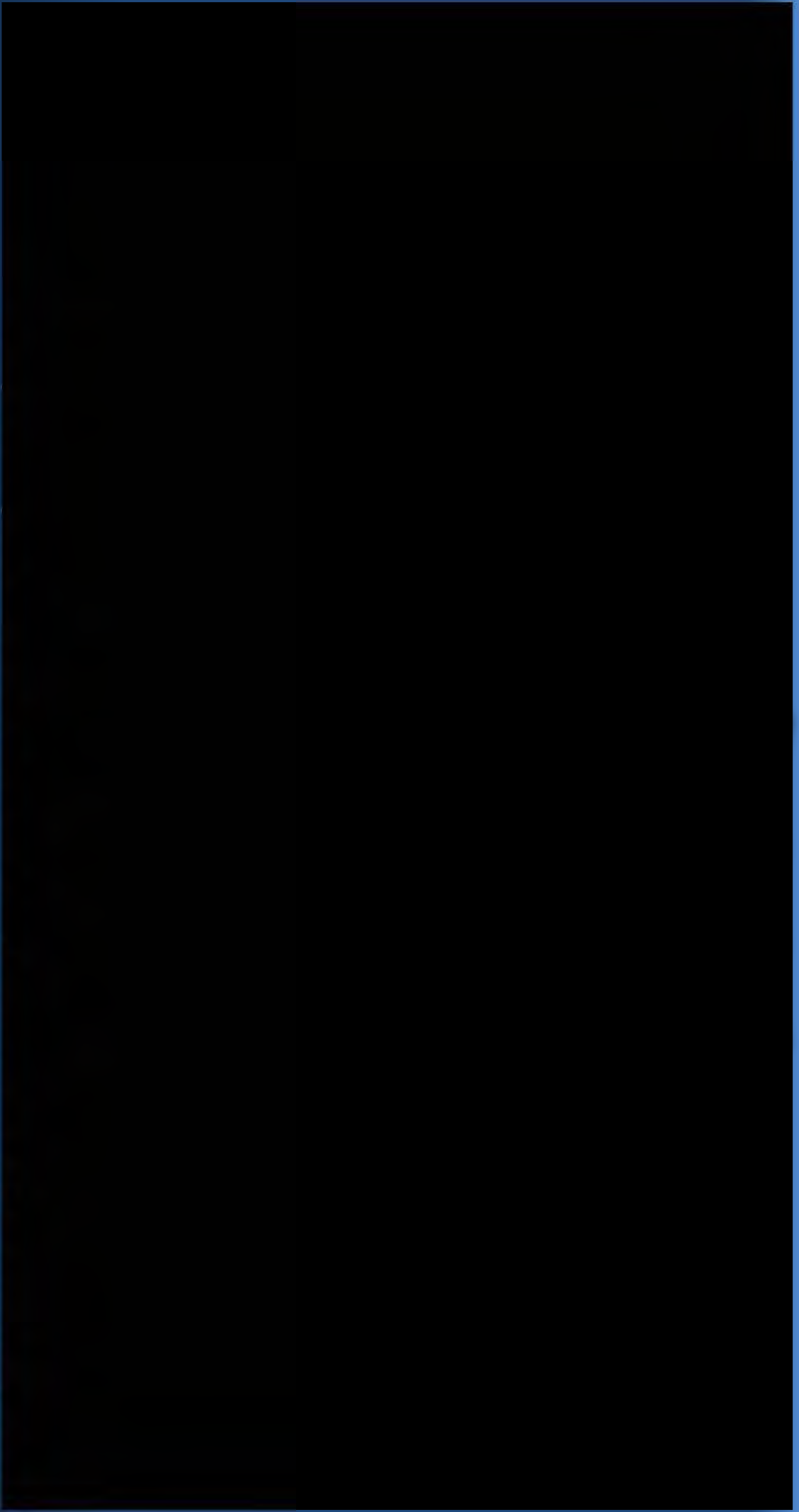
A. We do. We continue to see ... share shift from the GDS channel to the dot com."

Trial Tr. 864:14-17

Airlines Recognize Competition Between Airline.com And OTAs



OTAs Recognize Competition With Airline.com



FLX OC Is An Airline IT Services Product With Only Airline Customers

- Airline IT services are used as inputs by airlines:
 - Core PSS (reservations – e.g., SabreSonic)
 - Non-core PSS modules (e.g., FLX M merchandising)
 - NDC APIs
 - FLX OC is Farelogix's NDC API implementation service
 - FLX OC can provide certain order management functionality
- An airline may use FLX OC as an input in:
 - Direct connect (GDS bypass)
 - GDS integration (pass-through)
 - Airline.com

FLX OC's Competitive Constraints

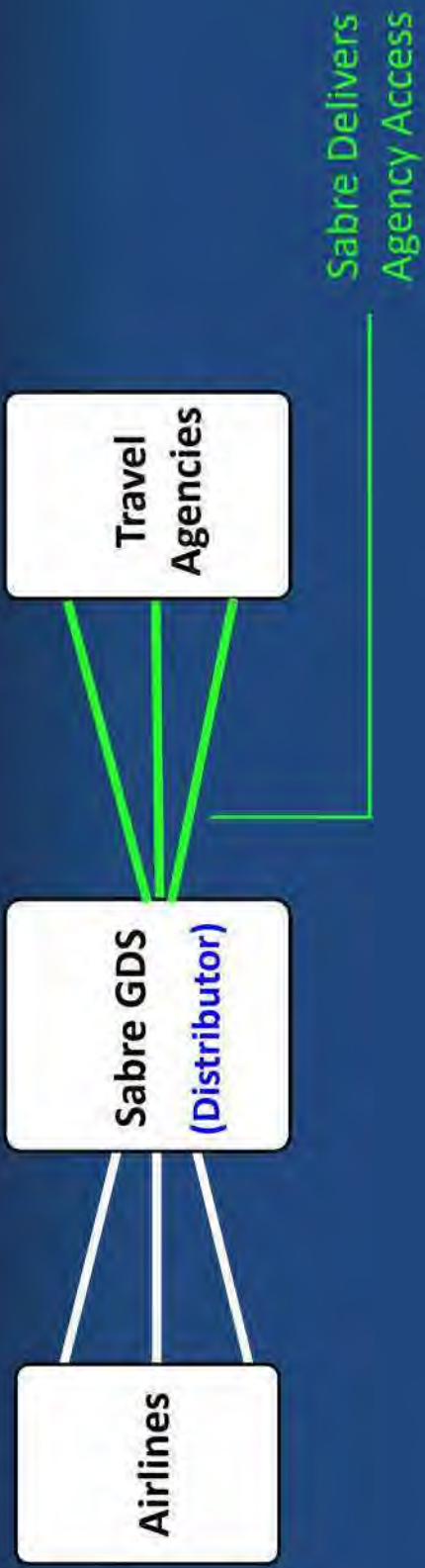
- FLX OC faces significant competition
 - Airline in-house NDC API implementations
 - Other NDC API suppliers
- FLX OC competes in a worldwide market
 - Airlines substitute among IT input suppliers globally
- Sabre (as NDC API provider) is not an effective competitor

FLX OC's Role In Direct Connect: Not A Horizontal Competitor To The GDS

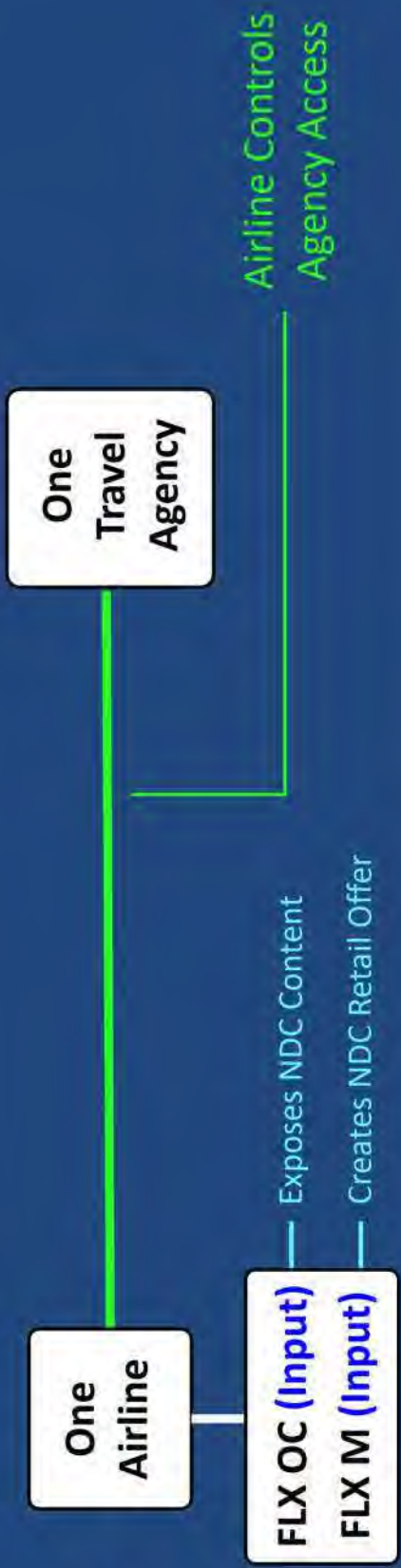
- Competition is between the airline and GDSs for access to travel agencies
- FLX OC is an input to airline self-supplied distribution
- Any potential overlap of “booking services” functionality does not make FLX OC a horizontal competitor to the GDS

FLX OC Does Not Compete With Sabre In Direct Connect

Distribution through Sabre GDS



Direct Connect Airline Self-Supplied Distribution



Direct Connect Is Not A Close Substitute For GDS Distribution

- Single airline content
- Costly for agencies to set up and maintain
- Lack of support for fulfillment services (corporate policy compliance, duty of care, etc.)

Direct Connects Are Costly And Inefficient For Travel Agencies



Rose
STRATFORD
BCD Travel

"I think the challenge there is we don't want to manage 30-50 APIs. There's 260 IATA airlines...I don't want to become a GDS."

Trial Tr. 1240:4-6



Werner
KUNZ-CHO
Fareportal

"... direct connects [is] too much already...[i]t's too expensive. It's too cumbersome. It adds a layer of complexity. It doesn't make any sense in terms of efficiency and productivity to serve our customers."

Trial Tr. 1314:19-21



Kurt
EKERT
CWT

"Q. What would happen if you had to make, say, 50 connections to 50 airlines?

A. I think it is unlikely that any travel management company in the world could do that in terms of technically, operationally, or in terms of affordability. I don't think there is a TMC in the world that is capable of doing that."

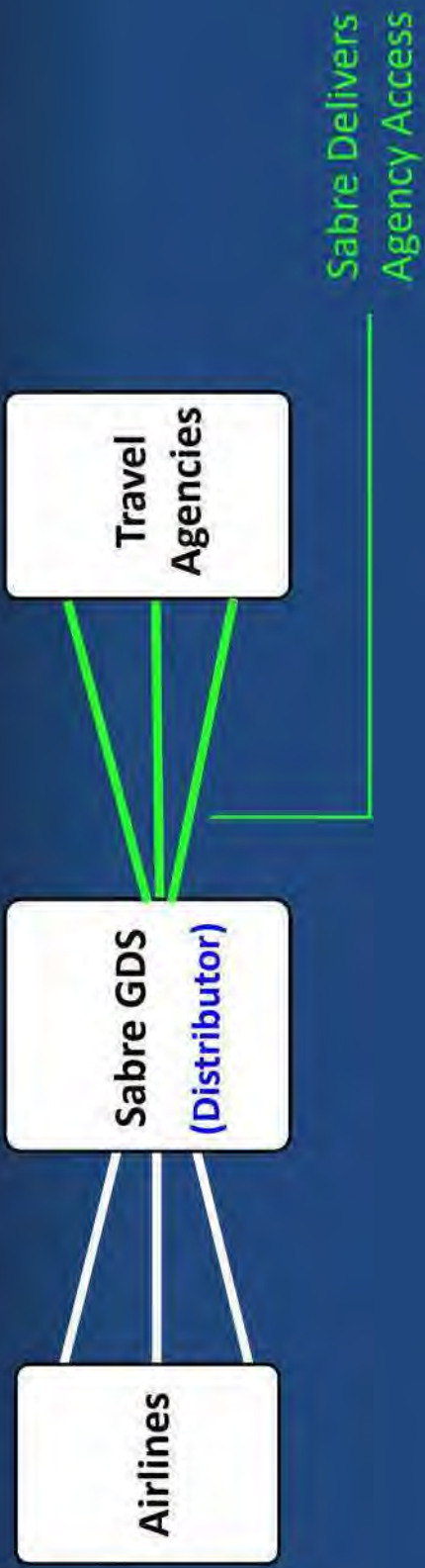
Trial Tr. 1197:19-22

FLX OC's Role In GDS Integration: Complement To The GDS

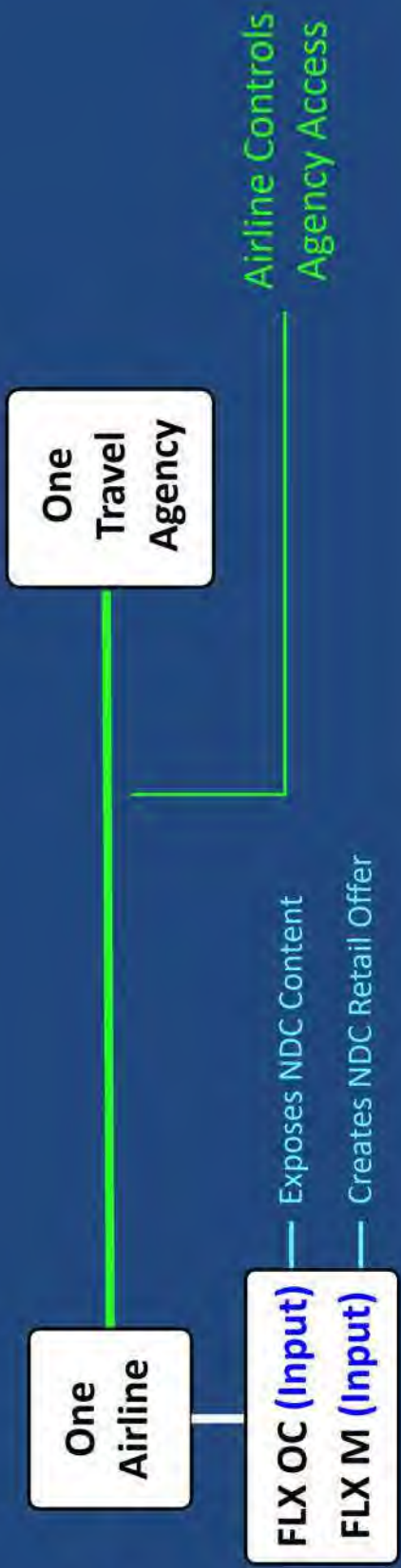
- FLX OC enhances the value of GDS distribution services by enabling NDC content distribution
- FLX OC is a complement to the GDS regardless of any potential overlap in “booking services” functionality
- Combining complements is pro-competitive

FLX OC Does Not Compete With Sabre In Direct Connect

Distribution through Sabre GDS

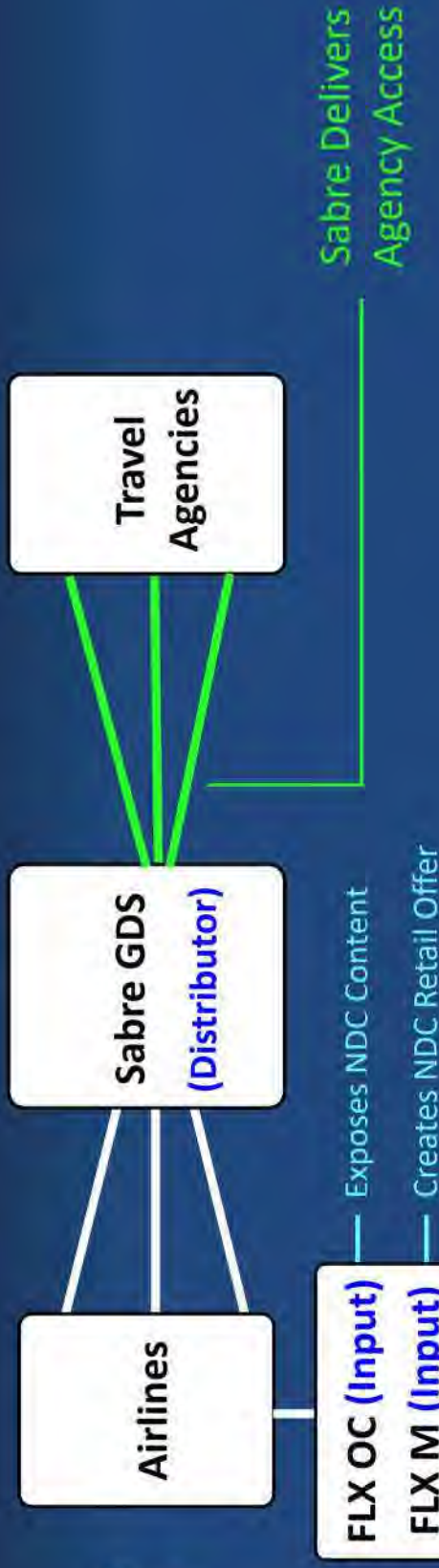


Direct Connect Airline Self-Supplied Distribution



FLX OC Complements Sabre in GDS Integration

GDS Integration
(Pass-Through)



Direct Connect
Airline Self-Supplied
Distribution



Future Growth Of FLX OC To Be Driven By GDS Integration, Not Direct Connect

- Increasing importance of ancillary sales to airlines – currently mostly sold through airline.com
- Adoption of NDC reflects airline demand to expand ancillary sales through indirect channels including GDSs (not just direct connect)
- In the economic interest of GDSs to develop NDC capabilities to meet the demand for NDC content
 - Ongoing GDS integration collaboration between airlines and GDSs
(Murphy Report Appendix 1)
- Adoption of NDC does not change the inherent limitations of direct connect

Airlines Understand Agencies Prefer To Obtain NDC Content Through GDSs



Jeff
LOBL
*Delta Air
Lines*

"Q. Why did you say that Delta was expecting that the overwhelming majority of our API consumption will be done by the GDSs?

A. Because we had a lot of conversations with our travel agency partners and the overwhelming majority of them want to continue working through the GDS."

"Q. And what have those travel agency partners told you?

A. They don't have the technological capability to replicate what GDSs provide to them, and so they would prefer to keep the GDSs involved in providing the technology."

Trial Tr. 1157:19-24, 1158:4-9



Christina
LARSON
*Hawaiian
Airlines*

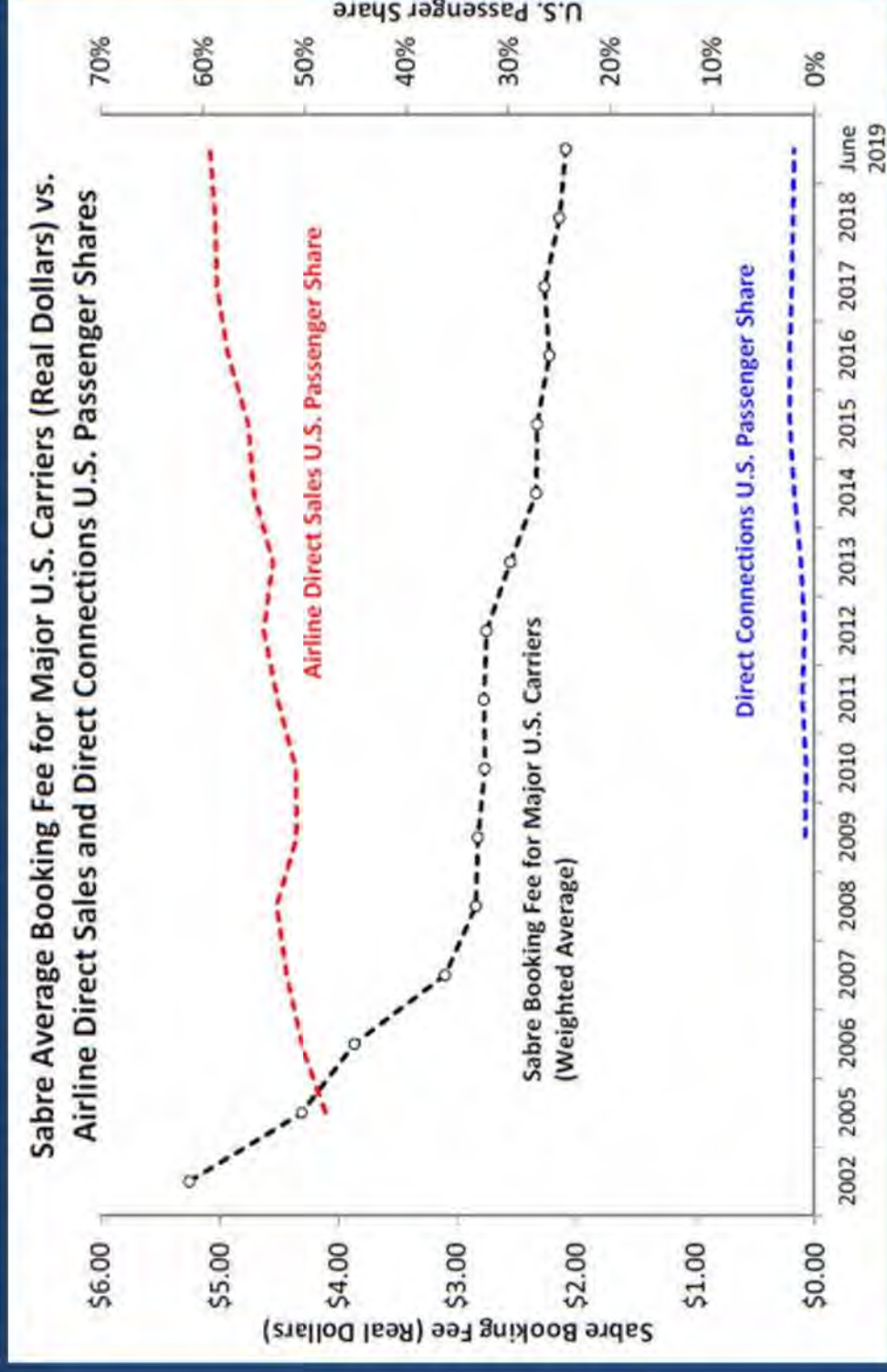
The Vertical Economic Framework

- The proper economic perspective for this merger is vertical, not horizontal
 - Vertical mergers involve firms that operate at different stages of the supply chain, and have different economic implications from mergers of horizontal competitors
 - Inappropriate application of the horizontal framework to vertical transactions results in flawed analysis and invalid conclusions
- Under the vertical framework, the primary question is whether the merger enables Sabre to restrict supply of NDC API services to its competitors, thereby reducing downstream competition
 - The answer is “no” based on current economic evidence

No Competitive Concerns From The Merger

- Primary competitive constraints on Sabre are unaffected by the merger
 - Rival GDSs
 - Airline.com
- Sabre will have no incentive or ability to restrict supply of NDC API services to its competitors
 - Competitive effect in the downstream distribution market from such actions would be *de minimis*
 - FLX OC is not unique

Airline Direct Sales Is A Much Greater Competitive Constraint Than Direct Connect On Sabre GDS



FLX OC Is Not Unique

- Airline in-house NDC API implementation
 - Delta, British Airways, Air France
- Other NDC API suppliers
 - Amadeus, Datalex, OpenJaw, TPConnects, etc.
- ATPCO/SITA NDC Exchange translation service (e.g., Southwest)
- Evidence from FLX OC bidding data
 - 2018: did not win any of 13 bids
 - 2019: won 1 out of 5 bids

The Merged Firm Will Have Strong Incentives To Innovate And Compete

- Proposed merger is Sabre's response to increasing demand for NDC content
 - Competitive pressure from airline.com, which currently has content advantage (ancillaries etc.) relative to GDSs
 - Sabre risks losing agency customers to rival GDSs if its NDC capabilities continue to lag
 - Amadeus, Sabre's principal competitor, is ahead on integrating NDC capabilities
- These competitive forces are not dependent on FLX OC, and will continue to give Sabre strong incentives to pursue NDC-related innovations post-merger

Sabre Has The Economic Incentive To Pursue NDC



Rose
STRATFORD
BCD Travel

“The idea of NDC is to provide more parity around what an airline distributes in their website... So the idea of being able to offer something that is more beneficial than existing fares that they offer today would be something that we're interested in, or if we're going to give our customers some benefit in some way, if the airline is going to provide them some kind of benefit whether it's through specific ancillaries or it's through specific faring, that they have access to all the content.”

Trial Tr. 1226:25-1227:10



Sue
CARTER
Farelogix

“[Airlines] are doing bundles now in 2019 and, you know, I sat at several industry events this fall, last fall, fall of 2019 and heard for the first time corporate travel managers standing up frustrated at their travel agency and their GDS because they weren't doing NDC fast enough. So it really has changed... [A]ll of a sudden everybody wants it and they can't get it fast enough.”

Trial Tr. 287:3-8, 287:25-288:1

Professor Nevo's Market Definition And Competitive Effects Analyses Are Invalid

- "Booking services" product is ill-defined
- Conflates air travel distribution services with airline IT services
- Inappropriate exclusion of airline direct sales
- His hypothetical monopolist tests (SSNIP tests) are uninformative
- His market concentration calculations are flawed

Professor Nevo's "Booking Services" Product Is Ill-Defined

- "Booking services" is not a product sold separately by either party
- Sabre GDS is a two-sided platform provided to airlines and travel agencies. FLX OC is a one-sided product provided to airlines
 - The fact that both can provide "booking services" functionality does not make the products or the components of those products close economic substitutes or put them in a hypothetical "booking services" market
- Professor Nevo testified that he has not analyzed the price or value of the "booking services" functionality of either Sabre GDS or FLX OC

Professor Nevo Conflates Air Travel Distribution With Airline IT Services

- Mis-identifies FLX OC rather than the airline as the competitor to Sabre in direct connect
- Mis-identifies FLX OC as substitute for rather than complement to Sabre in GDS integration

Professor Nevo Inappropriately Excludes Airline Direct Sales As An Important Competitive Constraint

- Ignores direct market evidence showing competitive pressure from airline.com on Sabre pricing
 - Sabre has consistently negotiated for full content (including web fares) by offering lower GDS booking fees
- Ignores Guidelines on the relevance of direct evidence
(*Horizontal Merger Guidelines, Section 4, "Market Definition"*)

Professor Nevo's SSNIP Tests Are Uninformative

- His tests are based on a product that is not sold or priced in any commercial context, and assume that the parties compete
- His "candidate market" arbitrarily includes direct connect but excludes airline.com, which is a closer competitive alternative to GDSs than direct connect, especially regarding OTA bookings
 - Professor Nevo testified that he does not know whether airline.com or direct connect is more important as a competitive constraint on Sabre
- His tests only allow airline responses that are completely untethered from real-world negotiations
 - Do not allow airlines to negotiate by selectively withholding content or imposing surcharges
 - Contradict the Guidelines on relevance of real-world responses
(*Horizontal Merger Guidelines, Section 4.1.3, "Implementing the Hypothetical Monopolist Test"*)

Professor Nevo's Market Concentration Calculations Are Flawed

- "The Agencies . . . do not rely on changes in concentration as a screen for or indicator of competitive effects from vertical theories of harm."
(DOJ/FTC Draft Vertical Merger Guidelines, p. 3)
- Significantly inflate concentration by excluding airline direct sales
- Significantly inflate concentration by attributing GDS integration bookings to Farelogix rather than GDSs
- Ignore potential growth of other NDC API providers, including self-builds

Professor Nevo's HHI Measures Do Not Exceed Guideline Thresholds For Sales Through OTAs When Airline Direct Sales Are Included

	<u>2018</u> <u>Shares</u>	<u>2020</u> <u>Projected Shares</u>
Post-Merger HHI	1115	1127
Change in HHI	19	53

Rebuttal Report of Dr. Kevin Murphy, Figure S-2

Professor Nevo's Changes In HHI Do Not Exceed Guideline Thresholds For TTA Sales When GDS Integration Bookings Are Attributed To GDSS

	<u>2018</u>	<u>2020</u>
	<u>Shares</u>	<u>Projected Shares</u>
Post-Merger HHI	3895	3898
Change in HHI	6	19

Rebuttal Report of Dr. Kevin Murphy, Figure S-3

Conclusion

- The proposed transaction is a vertical merger that enhances competition by combining complementary products
 - FLX M is complementary to Sabre's core PSS
 - FLX OC is complementary to Sabre GDS
- Enables Sabre to develop fully integrated solution to meet the demand for NDC content distribution
- Benefits airlines, travel agencies, and consumers