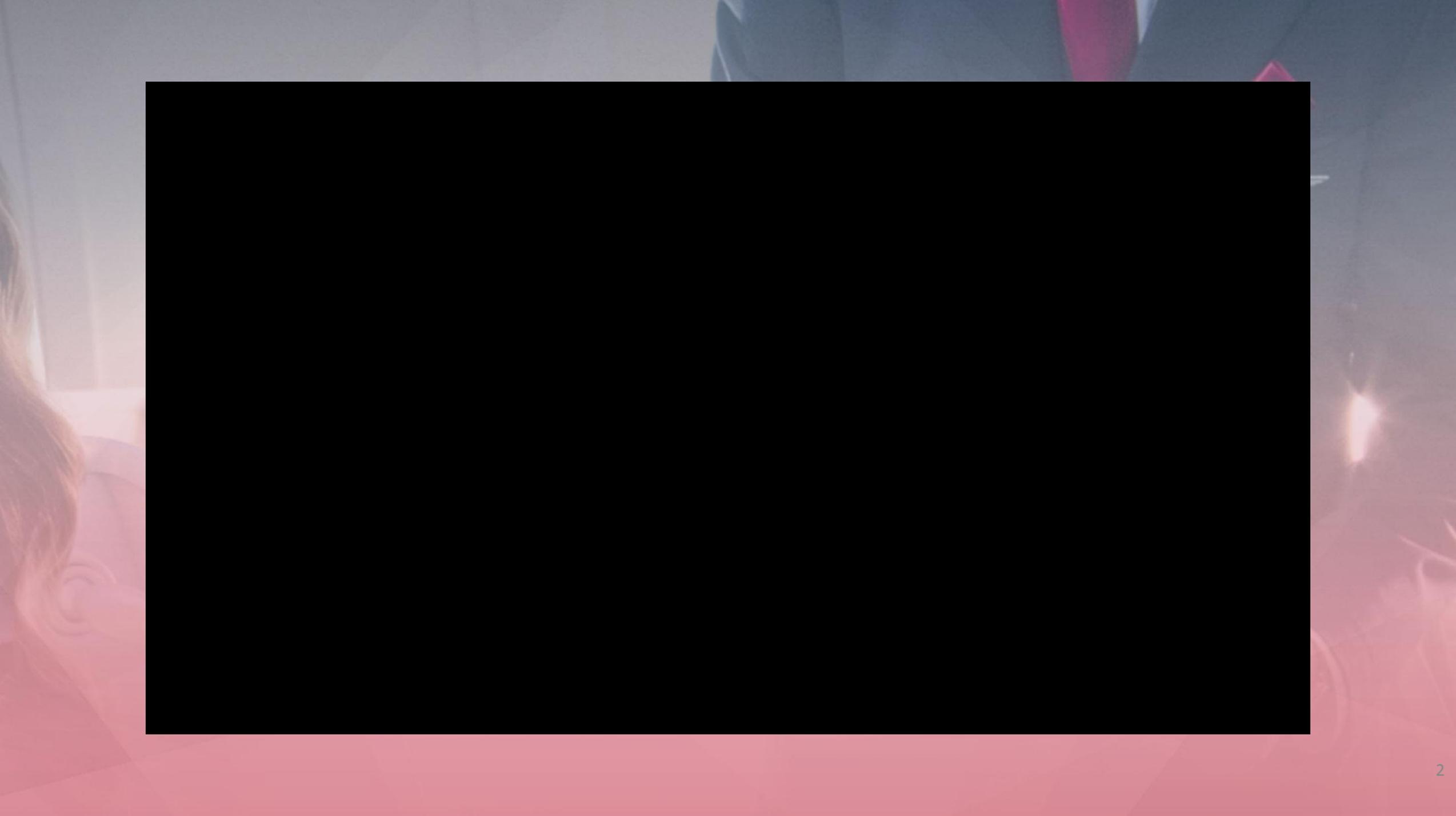




2020 vision





LISA BAUER – VICE PRESIDENT, ONBOARD SERVICES

2020  
vision

# Agenda Today - TOC and The Onboard Experience

- Delta Air Lines
- OnBoard Services
- The economics behind the complexity
- The Complexity
- The TOC Catering Challenge from Farm to Tray Table
- Supplier collaboration and the DL way
- Results so Far



- Founded in 1928 in Monroe, LA USA
- 334 destinations served in 62 countries
- More than 180 million customers annually
- More than 15,000\* daily flights
- 800 mainline aircraft
- Member of SkyTeam Alliance
  - Destinations served with worldwide partners: 661 destinations in 127 countries
- Key Hubs: Atlanta, Boston, Detroit, Los Angeles, Minneapolis-St. Paul, New York-JFK, New York-LaGuardia, **Salt** Lake City, Seattle, Amsterdam, London-Heathrow, Paris-Charles de Gaulle, and Tokyo-Narita
- ~80K employees
- Pre-tax income (2016) \$6.1 billion (excluding special items)
- \*includes partners



# OnBoard Services- Creating raving Delta fans

- Defining the onboard customer experience
- Menu planning
- Onboard product planning
- Catering execution and delivery
- Catering supply chain
- Service Delivery
- Compete beyond our immediate competitive set on key metrics
- Goal = NPS differentiation





# Economics behind the Complexity

- Before 9/11



- After 9/11



# Economics behind the Complexity

- The aftershock of a recession
- A wave of industry bankruptcies, mergers, and fuel spikes fundamentally altered the economics behind airline experience
- Galleys removed
- Product scaled back, seats added
- Airline vendor community decimated
- Innovation and operational excellence subordinated to staying afloat
- All aspects of the catering supply chain now outsourced (DL sold off final airline-owned kitchen in NRT in 2015)



# The Complexity- Delta by the numbers

- 25 different aircraft configurations
- 31 galley configurations across fleet(11 on the 757 alone)
- Three different cart specifications
- 5200 menu specs
- ~500 change notices/year for specification changes of various kinds
- More than 100K individual SKU's on a 747-400
- Significant daily aircraft changes (12K+ within 5 hours of departure in ATL in 2015)
- Cart builds unique by market, length of haul, time of day, etc.



# The catering challenge – from farm to tray table

- At DL we realize our complexity and external events are not the customers' problem
- We pride ourselves in finding innovative ways to deliver on our brand promise of being thoughtful, reliable, innovative
  - Refinery
  - JV partnerships
  - Catering
- For DL catering, the things we needed most (ability to manage uncertainty, variety, and change) represented a cost to the vendors. We had to find a way to break this conflict



# The catering Challenge – from farm to tray table

- To refresh menus quarterly we needed a speedy supply chain that reduces as much waste as possible
- To help the caterer manage inherent operational variability of an airline, we had to find a way to calm the catering operation – on time performance was suffering and quality too.
- We developed a CI team to partner with the caterers to use TOC to stabilize the operation.
- The key to stabilization was understanding the constraint (transportation) and then synchronizing and then subordinating all the activities to the constraint. A drum buffer rope (DBR) solution was implemented
- The results were immediately felt – like going from war to peacetime in the catering unit [insert graphic of synchronization]



# The Catering Challenge – From Farm to Tray Table

## *Sustainability is Key*

- To sustain the changes DL had to think differently about supplier collaboration
- Partnering with the vendor was the first step
- Re-writing contracts to align incentives to sustaining the model was the second
- DL is now introducing proprietary I.T. to measure and monitor compliance to the operating rules
- On the supply chain DL also developed proprietary I.T. to synchronize the activities of the supply chain and drive vendor collaboration
- Supply chain contracts are being re-worked to optimize flow



# Results so Far

In the hubs where Drum Buffer Rope was introduced on time performance improved dramatically with a **60-80%** reduction in delay rates

- The stability in the operation allows the flexibility to manage IROP and other exceptional events which in the past caused hundreds of delays in some hubs that took days to recover from
- The stability now allows for deeper dives into quality and other performance challenges
- The supply chain is showing signs of improvement where inventory buffers are now managed centrally across the supply chain. We have reduced lead times of some products by **90%**, eliminated obsolescence in some areas, and transitioned products without a hiccup



# Before/After ATL Caterer Production Floor



# Before/After ATL Inventory



# What's next?

- Inking contracts and fully implementing “the model” in all hubs and across the supply chain will be the final test
- We believe once this is complete we will have better transparency to costs and operational performance and can better manage relationships with our vendors so that our focus can be 100% on the customer
- Our vision is to make the onboard hospitality experience in the air what it can be on the ground
- Lots of work to go, but the customer keeps us climbing!

# Keep Climbing



# Questions?

# Thank You

