From:	Shirk, Dave
Sent:	Thu, 21 Sep 2017 13:17:21 -0500 (CDT)
To:	Doshi, Vinit[Vinit.Doshi@sabre.com]
Subject:	Fwd: Re: NDC/NDC+

Fyi. My new thinking . Believe consultant team is a better way to go. Need to rethink who we would pull from consulting and OR to be in this team.

-Dave

From: Samuel, John
Sent: Thursday, September 21, 2017 12:27:40 PM
To: Shirk, Dave
Subject: Re: NDC/NDC+

Dave,

I'm available between 12:30 and 1 if that can work for you. If not, I will reply to your thoughts by email.

Short version...I am very aligned with how you are thinking.

John Samuel
SVP, Strategic Projects

From: Shirk, Dave
Sent: Thursday, September 21, 2017 11:17:01 AM
To: Samuel, John
Subject: Re: NDC/NDC+

HI John,
Thanks for the note. Sorry my flights were a mess. I am now at the AS Customer Advisory Board. I will try to give you a call to catch up before Monday. Sounds like you and Vinit had a good discussion. I admit that I am not totally clear on the model. I just know Sean wants to see progress. I am also still working through all the ASPD stuff and trying to best resolve the Inventory and Checkin teams.

Here are thoughts that I shared with Sean after many debates on our most recent Asia trip and numerous NDC discussions. Let me know how this lines up with your thinking.

My thinking about the model so far has me believing that the best path may be two fold. A shared services approach to the basic kernel that is clear that we all need to align on core or basic NDC format support in the PSS/GDS. Not sure if this is Vish and team or if this is a dedicated effort. My recommendation is to let Vish and team do this since it will be shared and core.

I would then recommend that instead of hiring an R&D centric NDC leader that we hire a consulting leader. I think we set up a solution practice leader because much of the model is going to be consultative for the first few NDC+ efforts. Think of them more as assemblers "services/consulting" like group that works with travel agency, airline and each BU. This also allows the leader to help drive and shape the strategy. They ultimately leverage content and applications from each BU but mostly software from AS since a lot of the + of NDC as we have discussed will be AS based. This also means for business and revenue focus that AS has to continue to drive IX, DA, DR, RO, RI and align with ways to make NDC+ format meaningful for the airline. This lets the consulting team be more cross Sabre and not in conflict with the BU teams. Again eventually allowing harvesting of content into actual offerings. The consulting team needs some development/ additional consulting talent to build first proof of concepts for sure but these become leverageable later.
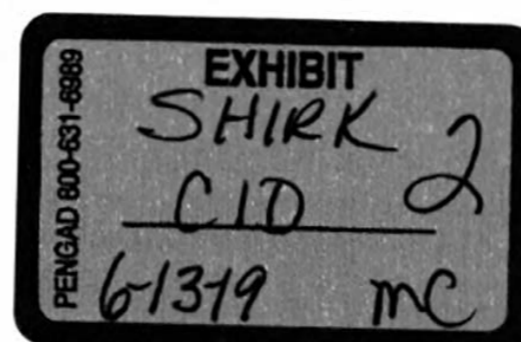
Anyway this is my current best thinking. Will call you as soon as I get a shot to do it. Might be around 12:30 today.

-Dave

From: John Samuel <John.Samuel@sabre.com>
Date: Sunday, September 17, 2017 at 8:08 AM
To: "Shirk, Dave" <Dave.Shirk@sabre.com>
Subject: Re: NDC/NDC+

Dave,

Thanks for your note. If you can arrange where we can have a call next week that will be great. I'm going to spend most of next week talking to key participants across the company.

Here are my initial thoughts after having spent some time with the NGR/NGD team. I hope you will excuse the length but writing it out helps organize thoughts (and I figure you are doing a lot of airplane reading ;).

It seems the effort breaks into two related projects with five "work streams":

1 - Get Core NDC-ready(NDC)
Modify our core systems to better support where airline (and travel overall) retailing is going.
- Modify connectivity services to become NDC certified/capable for both PSS and GDS.
- Modify our core domains to support more flexible Offer and Order data requirements (ancillaries, bundling, etc.).

2- Enhance Retailing Platform (NDC+)
Help our customers (airlines, agencies, etc) improve conversion, cross, and up sell. Both improve existing products and create new products in three primary areas:
- Trip, Traveler and Context Data
- Offer Engines and Decision Support Tools
- Touchpoint clients, API's and SDK's

For the NDC part, I think the team has identified some "no regret" actions that can be done to get started (e.g. creation of an offer store). But coordinating the steps with Mercury overall will be critical. And as you mentioned, we should try to build these as common services with orchestration enabling differences between the businesses.

The team will need to work closely with Vish's team to drive this part of the project with input from key architects from the BU's, e.g. Sergey.

The NDC+ part is obviously less clear. As we have discussed, it will be important to work with some forward-thinking partners, both air and agency, to try to better understand what combination of factors will best improve conversion and share of wallet. It will be critical to establish broad "test and learn" capabilities for iteration in both channels. The goal should be for the learning from this effort to get 3 to 6 months "ahead" of the core requirements.

I think the NGR/D team's proposed pilot phases provide some high-level guidance here.   But we need to also meet the existing requests from some customers (e.g. AA offer engine).

I think NDC+ is where the "secondment" model will make the most sense. This team will identify partners and work with them to jointly experiment and learn. The team will need to both work with the BU dev teams to modify existing products (e.g. Dynamic Retailer) and also design and create new ones. And, as you said, this platform should be agnostic to host or GDS.

I'm particularly interested in getting your thoughts on the "operating model" for this team. How do they go fast, share learnings, but stay connected to BU teams?

And lastly, as Sean mentioned in his note, team will need project management and communications support as well. There is also a need to coordinate on the business strategy for this such as timing, partner selection, pricing & business models, acquisitions, etc.

Hopefully this can spur some good discussion. I look forward to talking to you.

John Samuel
SVP, Strategic Projects

From: Shirk, Dave
Sent: Friday, September 15, 2017 6:02:29 AM
To: Samuel, John
Subject: Re: NDC/NDC+

Hi John,
Thanks for the note. I am trying to figure out how we might talk live. I have asked VInit to start the process of pulling thoughts together. I have talked with him, Rodrigo, Sergey, Suresh, Jim and others about how we best tackle this. I also talked at length with Sean on the APAC trip.

Here are some starting thoughts. I think we all agree that NDC is a content data interchange that the TN business needs to have. We need to be careful to not have this over enable Farelogix only to hurt us in all of our accounts. However as I am learning this is only a small step. The real need is going to be with the airlines and all the + work that surrounds NDC thus NDC+. Right now there are a number of pieces that AS has made down payments around. We need to understand how this will all work. I believe in discussing with Sean after we have now talked with several airlines that AS needs to keep doing this work but assume the project is an incubation of the core NDC work that creates a service that Wade and I can leverage and have an abstraction layer for orchestrations that allow to co-leverage. It is also critical that the AS work be GDS agnostic. We would want to sell this capability into an Amadeus or Navitaire account to gain control. This would also put us in line with Farelogix. We recognize that we have GDS work to do to handle the payload/content/CRUD ops etc.

So we need to figure out who makes the most sense from and AS centric level to join the incubation team and the "coordination and governance" that you want to put in place so we all stay aligned.

Hope this is making some sense. Again will try to find time probably next week on Tues to talk live. We can keep the thread going until then.

-Dave

From: John Samuel <John.Samuel@sabre.com>
Date: Thursday, September 14, 2017 at 3:20 PM
To: "Shirk, Dave" <Dave.Shirk@sabre.com>
Subject: Fwd: NDC/NDC+

Dave,

Due to your travel schedule, I am not going to be able to meet with you directly before the 25th to get your thoughts and feedback on the approach for NDC/+. Per the note below, I am meeting with Vish next week to get his thoughts.

But if there is anything you can pass along by email, that would be appreciated. Or if you have time for a call, that would be great as well.

Thanks.

John Samuel
SVP, Strategic Projects

From: Samuel, John
Sent: Thursday, September 14, 2017 2:09:59 PM
To: Doshi, Vinit
Subject: NDC/NDC+

Vinit,

As you may know, I am working with the NGR/NGD team to pull together the plans for moving forward with NDC/NDC+ to share at

MPR on the 25th.

I have scheduled some time with you on Tuesday to get your thoughts on this including:
- who do you want to be involved from your team (both full & part time)
- external communications and managing customer pilots
- any thoughts on program/project management leader
- how to best coordinate with you and the rest of eteam

I've started to work with the team to add some specificity to the "5 pilots" approach that the team proposed. I would also like to get your thoughts on that.

Thanks and I look forward to getting your feedback.

John Samuel
SVP, Sabre Product Development