## Exhibit 45

Custodians: Aparna Pappu; Sissie Hsiao

Witnesses: Aparna Pappu; Sissie Hsiao

## Message

From: Sissie Hsiao [sissie@google.com]

**Sent**: 3/18/2020 2:48:27 AM

To: Aparna Pappu [apappu@google.com]; Chris Harris [ckharris@google.com]

Subject: CAS Forever

• Sissie Hsiao, 2020-03-17 19:48:27

Hey friends.

• Sissie Hsiao, 2020-03-17 19:48:49

Wwyd with the situation where demand might be way higher than supply for a while?

• Sissie Hsiao, 2020-03-17 19:49:06

You would shift demand to your highest and best pubs right?

• Chris Harris, 2020-03-17 19:57:14

Not sure I understand the q...

• Chris Harris, 2020-03-17 19:57:33

First, this seems unlikely given the situation, so maybe my intuition is off

• Sissie Hsiao, 2020-03-17 19:57:44

Sorry

• Sissie Hsiao, 2020-03-17 19:57:46

Flipped that

• Sissie Hsiao, 2020-03-17 19:57:52

Demand way lower than supply

• Chris Harris, 2020-03-17 19:57:58

Ok, whew

• Sissie Hsiao, 2020-03-17 19:58:02

Brain not working well

• Sissie Hsiao, 2020-03-17 19:58:10

Ambient anxiety

• Chris Harris, 2020-03-17 19:58:18

I'm like, "I have yourself lost touch..."

• Chris Harris, 2020-03-17 19:58:32

totally, not yourself

• Chris Harris, 2020-03-17 19:58:40

Ok... umm

• Sissie Hsiao, 2020-03-17 19:58:56

Demand suffering. But ppl watching stuff online

• Chris Harris, 2020-03-17 19:58:57

So now demand expected to be down, definitely

• Sissie Hsiao, 2020-03-17 19:59:01

Impr might be going up

• Chris Harris, 2020-03-17 19:59:04

Yep, makes sense

• Chris Harris, 2020-03-17 19:59:35

So I'll start by saying that, doing nothing would be the most likely to be revenue maximizing.

• Chris Harris, 2020-03-17 19:59:48

Do you believe that?

• Chris Harris, 2020-03-17 20:00:13

Now I think you're asking, should you do something besides that...

• Sissie Hsiao, 2020-03-17 20:00:47

Yah

• Sissie Hsiao, 2020-03-17 20:00:57

More on plat vs off

• Sissie Hsiao, 2020-03-17 20:01:00

Eg

• Sissie Hsiao, 2020-03-17 20:01:27

Or margin tunings Eg help out on plat pubs vs off plat pubs

• Chris Harris, 2020-03-17 20:01:34

So give me a sec... I may wander...

• Chris Harris, 2020-03-17 20:01:47

One thing to think about is pub viability

• Chris Harris, 2020-03-17 20:02:04

So if certain pubs have higher fixed costs (e.g. newspapers)

• Chris Harris, 2020-03-17 20:02:14

They need a certain amount of revenue to not die

• Chris Harris, 2020-03-17 20:02:34

Which would lead to unemployment and then them not coming back for a long time.

• Aparna Pappu, 2020-03-17 20:02:45

Perf clusterfuck from Eileen is going badly

• Aparna Pappu, 2020-03-17 20:02:48

As expected

• Sissie Hsiao, 2020-03-17 20:03:06

Re perf

• Sissie Hsiao, 2020-03-17 20:03:14

Ya think we should've just finished it?

• Sissie Hsiao, 2020-03-17 20:03:23

Yah re pubs

• Sissie Hsiao, 2020-03-17 20:03:39

But hard to know exactly who to help. I guess we could start from the top...

• Chris Harris, 2020-03-17 20:03:51

So if you're looking to preserve the pubs overall as much as possible for next year, etc... that's something to think about: their gross margin and fixed costs

• Chris Harris, 2020-03-17 20:04:17

So, AFD prob doesn't need the money, for example...

• Chris Harris, 2020-03-17 20:04:28

Those are pretty high margin nearly content farms

• Sissie Hsiao, 2020-03-17 20:04:56

Right

• Chris Harris, 2020-03-17 20:05:06

This all feels pretty... tough though.

• Chris Harris, 2020-03-17 20:05:36

Like, I could see this being done in a way that leads to law suits

• Chris Harris, 2020-03-17 20:05:55

Omfg

• Chris Harris, 2020-03-17 20:06:00

History is on, jesus

• Chris Harris, 2020-03-17 20:06:49

Sigh