

What Data Migrations and Whale Migrations Have in Common

We humans are a noisy species.

Sometimes all the noise we make gets us into trouble. Sometimes it gets other species into trouble, too. Humpback whales, for example. An article I read recently explained how we noisy humans are making things difficult for those whales.

Here's why...

Massive Migrations

Humpback whales migrate thousands of miles per year. They routinely travel between their favorite feeding locations and their traditional breeding waters.

Humpbacks normally go about their daily activities in small pods of just a few individual whales. But during migrations they temporarily form into large groups that may number in size up to more than 100 individuals.

So how does a large group of whales stay organized and in sync during a multi-thousand-mile trip?

They communicate. They 'sing' to each other. (If you've heard recordings of the Humpbacks' song, you know that it's beautiful, enchanting, and somewhat haunting, all at the same time.)

Humans Are Guilty of Meddling with Migrations

The Humpbacks' system of communication during migrations has worked just fine for eons of time. But today? Not so much.

And it's our fault.

It seems that the oceans are just full of noise pollution caused by we raucous humans - mostly due to shipping traffic. As a result, it's estimated that the ability of the whales to communicate effectively may have dropped by as much as 90% in the noisiest areas of the oceans.

That noise has interfered with the ability of the whales to communicate. Marine biologists have even noticed that a spike of human-induced noise can cause the whales to suddenly stop attempting to communicate.

Projecting anthropomorphically, it's as though the whales just stop mid-sentence and fall silent out of frustration or confusion.

Noise Can Mess with ANY Migration

Right about now you might be thinking: "Well, I'm sure this is all very fascinating. But I thought you guys were focused on data migrations, not *whale* migrations!"

Indeed we are.

That's why the story of the whales' migration difficulties was particularly interesting. Because there's a direct correlation between the plight of the whales and data migrations.

We noisy humans, you see, are capable of messing up our own data migrations just as readily as we interfere with the whale migrations. And in exactly the same way: Too much noise.

And just like the marine biologists observing the whales' sometimes-foiled migration attempts, at DAG, we've observed data migrations becoming derailed because of noise pollution.

All too often, that happens because of:

- **The Noise of Overwhelm:** Companies sometimes attempt to perform their own migrations rather than hiring outside experts. The result? Employees tasked with the migration are overwhelmed with the 'noise' of trying to fulfill normal daily duties on top of migration duties. That puts the migration at risk, because all of that noise interferes with focusing exclusively on the migration. And that's a surefire way to *blow* a migration.
- **The Noise of Too Many Choices:** For companies that make the decision to perform their own migrations, there are many choices of tools and methodologies on the market. Too *many* choices, you might say. Because finding the right tools and methodologies for each company's respective environment can be quite overwhelming for the inexperienced. And the very process of trying to sort through all those choices can be noisy and distracting.
- **The Noise of Too Much Data:** An integral and critical component of a data migration is sorting through the data, choosing what to keep and what to discard. It's a tough job. And for the inexperienced, the difficulty of this task can create lots of 'noise' that can threaten the success of the migration process.
- **The Noise of Complexity:** A data migration is a very complex process that requires balancing the requirements of business with those of DBAs, application teams, storage teams, network teams, security teams, and others. The stridently voiced needs of each - sometimes conflicting one with

the other - can blend into an overwhelming cacophony of confusion for those inexperienced at managing a data migration project.

A Whale of a Project...

One other similarity between whale migrations and data migrations? They can each be a 'whale' of a project.

After all, synchronizing the movements of a hundred or more 50-ton critters along a multi-thousand-mile journey through the vastness of the open seas is quite the challenge. And moving billions of bits of data safely on a journey that potentially spans oceans and continents - all without disrupting daily business operations - is no less a challenge.

Throw in some confusion-inducing noise, and the difficulties can be increased exponentially.

The same culprit can be blamed for the difficulties encountered with both forms of migration. The whales can blame humans for their migration difficulties. And we humans, of course, are also to blame for our data migration difficulties.

At Data Agility Group, we're all about cutting through the noise and assuring that data migrations go with clockwork precision. We're vastly experienced in doing so.

Unfortunately, there's not much we can do for the whales (though we wish we could help!). But we can certainly sympathize with their problem. Because we understand the impact that noise can have upon *any* form of migration - no matter the species of critters involved.