

Four pillars to resolve the Big Data conundrum

Percipient has a bold ambition: to bridge the gap that financial institutions face in compiling data from multiple and incompatible systems, by creating a one-stop shop for faster, cheaper and better accessibility.

As a start-up, Percipient has taken on one of the most overwhelming challenges for financial institutions globally: consolidating and making meaning out of the vast amount of structured and unstructured data that is increasingly clogging up their systems.

Indeed, this has been the Achilles heel of the industry, including for the wealth management segment.

The traditional approach to building the back-end of banks has been to create stand-alone systems across loans, mortgages and credit, for instance.

As a result, data exists in isolation, and when it is aggregated into a data warehouse, it is essentially a jumble.

Most banks, for example, whether private or retail, can probably only join up between 40% and 60% of their data sources – yet for at least half of this there is a larger focus on meeting regu-

latory reporting obligations than on delivering a good customer experience.

As a result, the process of managing this warehouse, and then trying to get sense from the data, consumes significant amounts of money and resources. Plus, it is highly inefficient, so doesn't tend to lead to data being retrievable nor useable to make it meaningful as part of client interactions or creating the desired client experience.

The opportunity for a solution which can overcome all of the above, therefore, is unprecedented.

Percipient's slogan says it all: 'connecting data; delivering intelligence'.

"Two ingredients will create the 'winners' of tomorrow in the financial services space: data and how you use it, and the customer experience," says Navin Suri, chief executive officer of Singapore-based Percipient.



NAVIN SURI
Percipient

From a wealth management perspective, while firms want to use Big Data and technology to achieve this, the problem lies in the migration, he adds.



RAVI SHANKAR NAIR

Percipient

To date, Suri says the current status quo has been difficult to change. This is largely because vendors which build the data warehouses lacked the ability to bring together data sources they did not own.

Another problem for most banks and wealth management businesses comes in the form of trying to compress and store the data they have, in line with regulatory requirements. “In technological terms, once data is compressed it goes cold,” says Suri. “If one were to access that data they would need to de-compress it first, which is time consuming and expensive.”

The bigger banks that look to get rid of this constraint are bound by costs and cannot get out of their contracts.

GETTING YOUR DATA IN ORDER

While structured data is typically transaction-related, the main problem concerns unstructured data, given that

what this comprises ranges from web chats to call logs to videos and photos, for example.

Real-time data sources are required to join these two types, and hence harness the combined information to its fullest potential. So the focus needs to be on getting the various, multiple systems to talk to each other, explains Suri, yet without incurring excessive costs or taking too much time.

The fact that Percipient is platform-agnostic means the firm is confident that it offers a solution which also enables a business to access compressed data as ‘hot’.

In short, this means a bank can store as much data as it wants without worrying about how long it takes, not how much it costs, to access it.

THE PILLARS OF SUCCESS

The approach that Percipient is taking to achieve this for the banks can be

broken down into a number of steps, that collectively form four pillars.

The first of these is a solution that enables the industry to join up existing structured and unstructured data sources, along with real-time data. “Percipient reads both of them and gives

clients an ability to query directly from the data source, in real time,” explains Suri. “This is faster because there is no need to wait for the end of day batch run then get the data the next day,”

Doing it this way also helps to eliminate the risks of error and security breaches.

For example, if news breaks that China’s A-Share market has crashed 10% within the first 30 minutes of opening, proactive wealth managers will want to access a list of all their clients with exposure to China.

In general, the earliest it would take to extract such a document is the next day; it might even take between two and seven days in most cases.

Percipient claims it can enable any business to do this within 30 to 40 minutes of making the request in the system.

Further highlighting the issues relating to structured, unstructured and real-

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time data, wealth managers also face a challenge in being able to consolidate and pass on information and views from fund managers to clients who hold the respective funds.

Percipient claims it can bring in unstructured data from what various fund

manager either say or write in terms of their outlook, and then make it relevant to individual clients. "All the conversations can be converted into text within a couple of hours," explains Suri. "This provides for wealth managers a sentiment analysis of the portfolio for their customers, which can be delivered by the end of each day."

The second pillar relates to the need to deliver business insights.

In this way, Percipient's aim is to help wealth managers look a level deeper

Yet Percipient believes there is an opportunity to disrupt this.

The firm is already speaking to several clients about introducing a new pricing model which makes solutions more scalable from the banks' perspectives.

For example, rather than the USD500,000-plus cost which seems to be involved for an institution in adding an additional CPU or two, a commoditised machine would cost between USD4,000 and USD5,000 to achieve something similar, adds Suri.

Suri sums this up as "disruptive technology at a disruptive price".

The assumption that Percipient is making is that it can help banks transfer their existing, expensive and resource-guzzling data warehouses to the type of digital platform which the firm is talking about.

If this is correct, then the fourth pillar, involving the implementation of new technologies, comes into play.

It has typically been the likes of Google, Yahoo, Amazon, Facebook and LinkedIn which have pioneered the adoption of newer technologies – such as parallel processing of all their voluminous data. But these have now been around for long enough to give banks comfort in using them too.

As they do so, Percipient says it can offer new capabilities in relation to Big Data by using both open source and proprietary technologies.

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than ever before at what their customers are doing in their accounts, and see to what extent this is reflected in what they say.

Such insights are inevitably sharper and more reliable, to spur both advisers and their clients to take specific actions.

While the first two pillars involve streamlining and aggregating the data into something useable and accessible, the third one is about reducing the costs associated with Big Data.

The problem, says Suri, lies in the traditional licensing model of the bigger players; it ties institutions into paying more for every new central processing unit (CPU) or user they add.

This is based on a 'pay once, use forever' philosophy. This should be music to the ears of businesses which add terabytes or petabytes of data every year, or constantly need new machines.

"This is an innovative creation," explains Ravi Shankar Nair, chief technology officer at Percipient.

"This helps clients move from one type of model where they were relying on highly-expensive infrastructure, towards parallel and scalable architecture which doesn't cost them as much as the traditional technology."

It is all about scaling out architecture, not scaling it up, to ensure it is much cheaper to maintain and grow.

These include use of commodity machines, plus the fact that there is no longer any need for copying – by applying in-memory processing instead.

At the same time, the firm's 'UniConnect' platform is able to unify data from more than 130 different data sources through a single interface.

A key advantage for a wealth management business, explains Nair, is that it can now access untapped data sources as part of the overall solution that Percipient offers.

This embodies what the firm says it wants to be known for providing – easier, faster and cheaper access to useable data. ■