CELENT

CLOUD AND PAYMENTS: A MATCH MADE IN HEAVEN?

TRANSFORMING PAYMENTS

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INTRODUCTION

In many banks, the payments infrastructure is barely suitable for today, let alone tomorrow. Banks face ever more changes, and adding more patches simply isn't advisable or even possible—for example, a heritage batch system simply can't be kludged to handle an instant payment using ISO20022. Most banks understand this and recognize that they need a modern payments solution. However, many banks are still hesitant about adopting cloud as part of that modernization, despite the clear benefits of doing so.

Cloudy With a Chance of Rain

Previous Celent reports have outlined the many benefits cloud *could* bring. A non-exhaustive list includes:

- **Scalability**. Cloud allows the solution always to be "right-sized" and grow as demand requires. Equally, it can scale back when not needed. No longer should there be a need to invest in unused capacity, especially when 90% of capacity is typically idle for 90% of the time in many banks' payments systems. Cloud offers a significant saving. It also allows for banks to maintain and improve Straight-Through-Processing (STP), especially as ISO20022 messages are adopted. ISO20022 messages are often significantly larger in size than equivalent legacy messages.
- **Agility**. Cloud enables banks to innovate and create tailor-made solutions for their clients, using standard building blocks at a much lower return on investment (ROI) for the new services. Furthermore, not only can the solutions be rolled out "on the fly," but also the platform itself can be updated in real time as well. It means the end of downtime and being trapped on old versions of software.
- **Cost**. In effect, someone else has already invested in the technology stack to make it work, and ongoing investment costs are shared by all the users. The maintenance and support of that technology and ongoing upgrades are also part of that cost. Not only that, given the competition in the cloud solution space, that investment is significantly higher than any one bank could ever make.
- **Security**. The cloud vendors have invested significant sums of money in meeting all the necessary regulatory security standards, and the regulations that banks face. With the cloud, security will be stronger and more sophisticated than any one single bank could devise.
- **Future Proofing**. Change, as the saying goes, is constant. The opening section discussed the likely impacts of the changes we're already facing, but how do you plan for their downstream consequences, or indeed, those we can't even imagine?

Note the emphasis on could. Cloud doesn't guarantee any of these benefits but offers the potential of all of them. This is because there isn't one such thing as cloud. As a result, understanding the nuances and possibilities is critical. An analogy might be buying a new car. The benefits of switching from riding a bicycle to driving a car are somewhat analogous: You can carry more people (scalability), go whenever you want (agility), and transport children when the time comes (future proofing!). Yet there are many different types of car, each offering different benefits and drawbacks. A sports car may be great for speed, but not for cost or the school run; a convertible may be fun but not appropriate for the local weather!

This report sets out some of the things that banks need to consider when researching whether cloud is appropriate and ensuring that they are comparing like-for-like solutions not Fords and Ferraris!

SO…WHAT DO YOU MEAN BY CLOUD EXACTLY?

This may sound like an obvious question, but one which is surprisingly tricky to answer because the devil is often in the detail. A quick look at the industry will highlight that both banks and vendors are often using similar or even the same terms to mean quite different things, and vice versa. It is important then that banks start to separate out the different facets and options available to ensure not just that they are comparing apples with apples, but actually that it's apples they want, need, and are being offered!

A later paper will go into greater depth, comparing and contrasting the myriad of options, and will also dissect many of the different variations on offer, from Payments as a Service (PaaS, itself not to be confused with Platform as a Service!) to Software as a Service (SaaS), from private hybrid to multi-tenant public. In this paper, we don't attempt to identify every single choice or offer; instead, we caution that there is a danger in banks exploring just one offering without understanding the implications of doing so. We outline four broad areas where choices will need to be made and highlight just a few of the considerations. These alone should show why a bank needs to be careful.

The four areas are:

- Payment Solution Cloud Readiness.
- The Type of Cloud.
- Who Runs What.
- The Scope of the Arrangement.

Banks need to be aware that there are also linkages between areas, and so their order of priority and weighting will have implications. For example, while many vendors will describe themselves as cloud ready, the solution may be optimized for just one specific cloud solution, or might be agnostic/independent to any cloud solution; conversely, that same platform might be available as a SaaS or PaaS, but with PaaS the buyer has no choice as to the sole cloud provider the solution is run on.

PAYMENT SOLUTION CLOUD READINESS

Our assumption is that banks are doing their homework and are only shortlisting solutions that meet their payment processing requirements as the primary objective. The wrong system is the wrong system however it is deployed. This is more fundamental. Many payment technology processing solutions will describe themselves as cloud ready or enabled, but banks need to ask themselves (and the vendors) what this actually means. To fully benefit from cloud, the solutions need to be built utilizing cloud technology. This may seem obvious, yet not all solutions have been truly built this way—rather they have been rebuilt from previous versions. Furthermore, there is likely a difference between how they use the terms cloud ready, native, agnostic, and independent. There is much debate to what those differences are because each vendor uses them differently. Some solutions have been built using one particular cloud provider's technology. While it may be cloud *ready*, it will be less optimal to run it on a different cloud solution, and it will likely not run on two clouds.

THE TYPE OF CLOUD

There is often a disconnect between what the banks want and what they think is acceptable. While they want the benefits of public cloud (multi-tenant), other factors are equally important. Risk and security concerns often mean they think they want the solution to themselves (single tenant, private cloud), and want to ensure that no data leaves the country (sovereign cloud). All these variations offer different benefits, and the choices are often the largest reason why some banks feel that cloud hasn't delivered all the benefits that it promised. For example, private sovereign cloud simply cannot deliver the same cost benefits as public multi-tenant.

To add further considerations, bigger banks are also starting to think about multi-cloud (that is, two or more cloud providers), with splits both horizontal (that is, with different components spread across both solutions) and vertical (where the solutions operate in an active:active configuration). To add further complexity, hybrid solutions are emerging where some elements are run on premise, with the rest run in the cloud.

Who Runs What

This may be an inelegant way to describe the options available but they range from being on premise, but "just" on someone's "tin" all the way through to where it's very close to outsourcing the payment operations. Broadly, the choices are: run it yourself; get help running it (SaaS); or just consume the service (PaaS). This is closely related to the final area.

The Scope of the Arrangement

Given the range of options, it is easy to see that the vendor could provide additional services, from repairs to operations. We call it out separately from the previous question because there are many implications. For example, who is liable for what? What are the regulatory implications in terms of liability? What are the implications for current and future staffing? The latter is particularly important, and often overlooked. It's not only whether the bank has the skills to operate something in the cloud but also if the bank moves to PaaS, there is a likelihood that the bank will lose those skills inhouse. In effect, it is one-way street, where it is difficult to reverse direction and back up.

None of these are things that many banks—and indeed, businesses globally—haven't addressed before. However, they are all things that a bank needs to consciously consider in order to evaluate what the implications are for them.

The Path Forward

Celent firmly believes that cloud offers many banks the path forward in payments. At the same time, Celent also believes that unless a bank thoroughly understands both the options and their implications, they are at best going to be disappointed in the return on their investments. At worst, a bank may find that it has made a mistake that will be costly to rectify. Central to this will be striking the right balance between compromise and opportunity. Given that for many banks this is new ground, and that they may feel they are trailblazers, we have deliberately listed compromises first as that's likely to be the determining factor. These, in turn, will need to be driven by detailed and nuanced understandings of the offerings on the market.

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