

POINT OF SALE: INNOVATION ASSET OR LIABILITY?

MAKING THE CASE FOR CLOUD POS TO
SUPPORT AGILE INNOVATION IN RETAIL



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FOREWORD

When I wrote this paper a few months back, the retailer market hadn't been hit by the current circumstances that, for many, have brought in-store buying habits to a standstill. But at some point, we will return to normality and buying habits will resume. That's why it's important to address the future impact of digital on Retail, today. And that is the purpose of this paper.

Let's be specific. Retail is the most dramatically impacted because digital has given customers more choice, more variety and is able to influence customers in different ways – whether that is through advertising & re-marketing through social channels, shopping on-line, browsing on-line and shopping in-store or shopping on-line and picking up in-store. The Customer is king. And, the impact for Retailers that have not been able to keep pace with their competitors, traditional and non, is profound. Well-known names like up-market fashion retailer L K Bennett and wine retailer OddBins filed for administration in 2019. In fact, a net 1,234 stores closed during the first six months of this year, around 10% more than 2018 according to PwC and that's only when the UK is considered.

So what? You are probably thinking, but we know all this? But hopefully I am going to outline something new, specifically about Point of Sale (POS) systems. Yes. POS, probably the most critical in-store system for any retailer. The ability to take cash in exchange for goods and track in-store transactions is pretty mission critical.

The provision of POS systems has become an industry in and of itself. From the humble beginnings of the first register, invented in 1879, to the sophisticated functionality of some of the Cloud POS vendors, which have the capability of tracking employee activity and inventory, delivering invoices, tracking sales and so on. In fact, as POS vendors fight to compete in their segment they have continually added more and more functionality to their systems. But, is this a good thing?

I have been spending a lot of time with retailers recently and with our partners that are active in retail, and recently came across something that I think is a revolutionary approach. I'm encouraging those retailers in my network to consider this new approach to POS carefully, as I believe it could provide a considerably more cost effective and high-performance approach.

Rather than building out complex POS systems, these retailers are instead opting for a 'thin' POS that's 100% cloud native and easily integrated with the extensive data and business logic contained across the retailer's existing applications. Agile development tools have been instrumental to achieving this goal, allowing development to occur once for complex apps delivered via any channel or customer touchpoint. The result has been vastly quicker innovation with improved services for both customers and employees.

We've found this approach is really resonating with retailers as they try to simplify their application architectures and become agile so they can experiment with new digital-led processes and leverage the technology investments they have already made. So with this in mind I ask the question again. Is it a good thing that the latest POS systems have developed so much functionality around inventory management, employee activity, customer transactions? Haven't most Retailers already invested significant amounts of money in ERP, HR and CRM systems that do all this? So why are they investing twice? Is there not a better way?

This whitepaper explains the fundamental choice retailers are faced with today: should my POS be in the cloud, or not? And makes the case for a cloud approach by sharing the experiences of our Norwegian partner EINR, who are achieving extraordinary omnichannel results for retailers with cloud-based POS.



AGILE INNOVATION WITH A THIN POS

There is another way. Why not let the POS be an POS? With a simple, cloud-based system like POSbE (POS by EINR) you can ensure the POS is fast and effective at processing customer orders, whilst transferring that transactional data continuously, in real-time to a master data view. Built to run on any device or any cloud, the system is intentionally designed to be 'thin'. No bells, no whistles.

This means you have a single installation without costly on-site infrastructure that's complex to install and maintain. If you want to open a new store quickly, it won't be the deployment and delivery of your POS that slows you down. Similarly, if you want your employees to be mobile, to be able to serve customers and process a transaction from a tablet on the shop-floor, that's all possible with a cloud architecture – all you need is a network connection over WIFI or 4G.

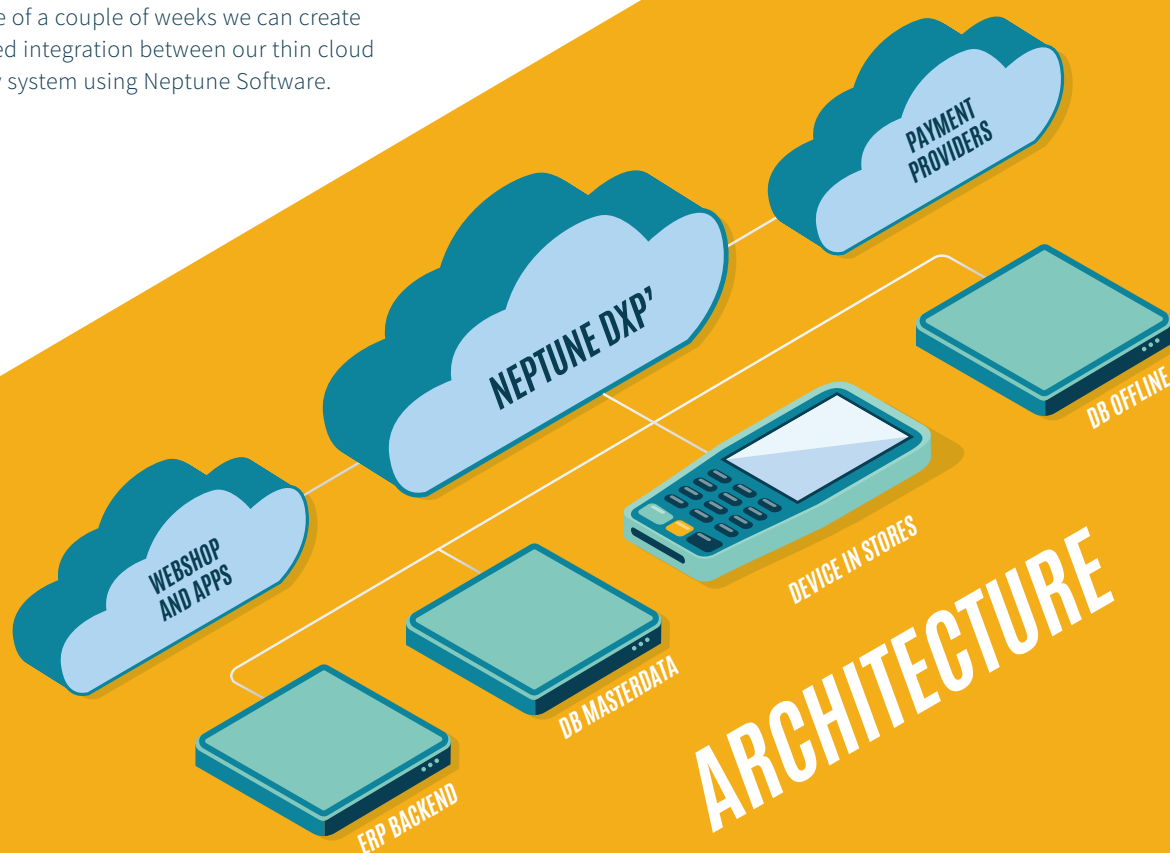
When it comes to delivering digital innovation by combining the data and business logic of your various systems that's made possible by a 'low-code' approach. Low-code platforms like Neptune Software's Digital Experience (DX) Platform mean it's Possible to create APIs that extract the data and logic from your underlying applications, such as ERP, warehousing and CRM, combining it with the real-time data from your thin, cloud-based, POS. And it's here that retailers, their employees and their customers see the greatest practical benefits.

Let's take loyalty as an example. If we want to be able to recognize a customer's loyalty points and status in-store at check-out, we don't need to have a separate loyalty system residing within the POS. Rather, over the course of a couple of weeks we can create a quick and simple API-based integration between our thin cloud POS and our existing loyalty system using Neptune Software.

This way the various systems are continually exchanging the data they require in the background in order to deliver the front-end innovation the retailer needs to build loyalty. Doesn't that sound better than a twelve month loyalty system integration project? This benefit is further amplified when you consider more complex business innovation such as 'click and collect', which requires data and logic from inventory, ordering, delivery scheduling, loyalty, CRM and many more applications.

By approaching your architecture in this way it's possible to vastly simplify your development set-up whilst avoiding a situation where you end-up with two expensive and competing 'master' systems in your ERP and POS suites. You'll probably save a significant sum in software license fees too.

This approach has proved successful for a number of retailers, including Bohus that runs 60 furniture stores across Norway.





BOHUS: INNOVATING WITH CLOUD POINT OF SALE

Competing with Ikea isn't straightforward but Bohus remains Norway's largest furniture retailer offering customers everything from sofas to textiles and carpets from 60 stores throughout the country. The company describes itself as a 'complex retailer', unlike a grocer this means products are large and when requested in store they often need to be purchased from a third party supplier with a longer lead time, more complex payment process and significant customization.

This uniqueness made the firm's choice of POS architecture critical. More than 90% of sales originate in-store with

e-Commerce accounting for just 10%, and more than 80% of the company's sales are handled as 'SAP Sales Orders' which makes integration between the POS and SAP system a priority.

A Sales Order is an on-going record that logs the customer order in the POS and manages it right through to fulfillment and payment, which often only happens when the furniture has been successfully delivered to the customer's home. Bohus staff can add-in additional products, make amendments and customize items within the Sales Order throughout the lifecycle of customer interaction.





FROM BARRIER TO ENABLER: DELIVERING FLEXIBILITY WITH CLOUD POINT OF SALE

Like many of its peers Bohus ran its sales through a legacy, on-premise and hardware heavy POS which was acquired in 2011. The company knew the system was quickly becoming outdated with its third-party vendor unable to keep pace with change requests and spiraling operational costs.

The catalyst for change came with the introduction of a new regulation in January 2019 requiring every retailer in Norway to keep detailed logs from its POS to help combat fraud by for example, making a note of when the cash drawer was open. It was apparent that retrofitting this capability to the legacy POS wasn't feasible offering Bohus the opportunity to re-imagine the role of a modern POS system.

But the new regulation was symptomatic of wider challenges, the retailer wanted to integrate its new loyalty system at point of sale and knew it needed to enhance its in-store sales experience by allowing staff to be mobile, as well as improving how payment could be accepted during the delivery process. This was a daunting task with long and costly development cycles that made the business case difficult.

Bohus turned to EINR and its new cloud POS system run from any cloud, in Bohus' case on Amazon, to deliver a light, flexible and easily configurable approach to POS. Designed and built with modern cloud technology EINR's POS could be integrated quickly and easily with the rich functionality and master data Bohus was already paying for with its SAP installation, not to mention virtually any other system they felt could enhance business processes.



SERVING CUSTOMERS ON THE SHOP-FLOOR

One of the first initiatives was to put the POS into the hands of Bohus' sales team so they could better serve customers and process orders on the shop floor, something that's vital when retailing complex, high-value products. Now Bohus staff can see and amend the SAP Sales Order and entire the customer journey from product look-up to delivery and payment from anywhere, on any device.

The cloud architecture makes it possible for delivery drivers to accept payment from customers upon delivery of their furniture and amend orders if something isn't right as well as enabling Bohus to run a range of pop-up stores at some of Norway's popular furniture fairs for the first time.



LOYALTY DELIVERED IN WEEKS

Bohus had invested in a loyalty programme some time ago but hadn't been able to integrate it at POS due to the cost and complexity. Following adoption of EINR's cloud POS the company will soon be able to identify a loyalty member at POS and automatically offer them personalised coupons for discounts and offers based on who they are. At the time of writing this enhancement is on-going with a delivery timeline of weeks, not months.



NEW STORE? NO PROBLEM

Rolling out a new store location with POS previously took weeks as servers needed to be provisioned and configured by a third-party, now this happens in a matter of hours as Bohus can set everything up themselves via a web interface. 10 stores were transitioned to the new system in a single week and 60 stores are now live with EINR's cloud POS.



BUILDING THE BUSINESS CASE

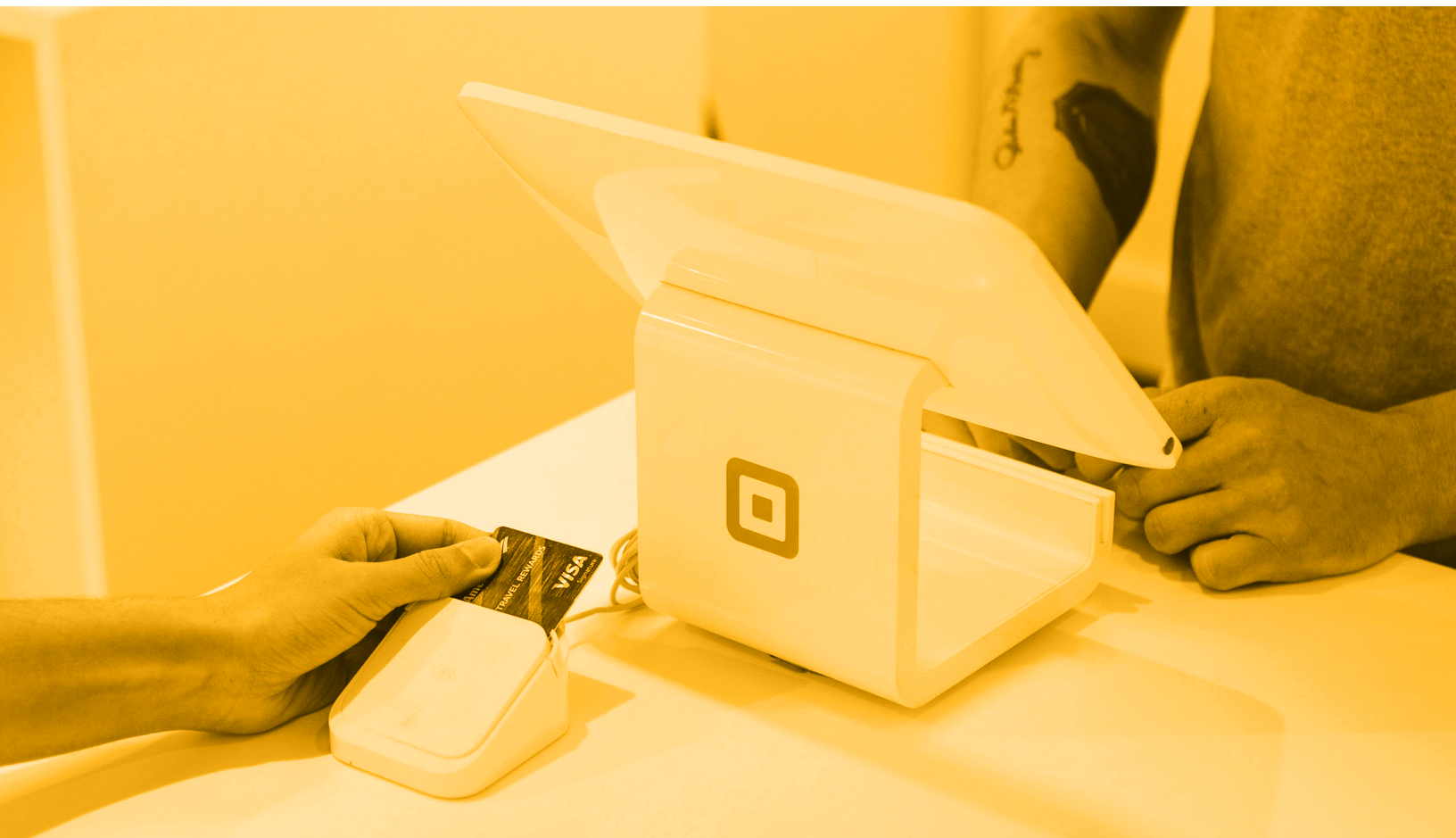
Despite the wide range of business benefits, Bohus was able to build a business case on very tangible cost reduction

***75% reduction in
POS operational costs***

Bohus were running 30 virtual servers across seven physical machines just to 'keep the lights on' which all required back-ups, patching and servicing, often at multiple locations for 60 stores. In addition, for any type of change management costs quickly escalated with four man days at £1,000 per day needed just to provision the legacy POS for a new store location.

With new approach the retailer runs a thin POS on AWS with the flexibility to switch to Microsoft Azure or another cloud, should they wish as well as vastly reduced costs and timescales for adding new functionality. The retailer is seeing savings of 720,000 Norwegian Kroner each month, across all 60 of its stores. Rather than trying to turn their POS into a 'mini-ERP' Bohus uses the API-driven approach to maximise the value of the business logic and data contained within its SAP installation.

The new POS solution from EINR is built in Neptune Software's low-code platform. The native cloud POS combined with Neptune Software's low code platform make this a flexible and future-proof set-up that helps Bohus achieve its business objectives.



DATA: WHEN AND WHERE YOU NEED IT

Ensuring accurate, complete and available data where and when you need it is the life blood for a modern retailer, and ultimately how you set-up your POS will have a material impact on how you manage your data.

With a traditional POS transactional sales data might be pushed up to HQ from the store in 'batches', typically on a semi-regular basis of say every hour, or perhaps even via an overnight load. This is how it's been done since the 1990's and is fine for general business intelligence to inform boardroom decision making but is very far from adequate for today's digitally-driven retailer.

But the POS doesn't just send data back to the business, increasingly it needs to receive and make use of that data e.g. loyalty or CRM insights. This begs an important question: where should your master data, your single view, or one trusted representation of data, reside? And how do we update and get that master data to where it's needed quickly?

In our view, this is the single biggest advantage of a cloud architected POS. As Sindre Stabell, Senior Partner at EINR puts it **"POS has traditionally relied on its own siloed data that's disconnected from the web and other channels. If you take that on-premise path, with different data views, you will always be playing catch-up. There's very little opportunity to deliver truly cross-channel consistency and innovation."**

Clearly we believe there needs to be a master data view, whether it resides in the existing ERP system, or a specific Master Data Management hub, depends on each retailer. But replicating data locally for the POS, or trying to make the POS a master data store invites unnecessary complexity. What matters more is the ability to get this data to where it's valuable in a 'publish and subscribe' approach. With the cloud this is incredibly simple to achieve using APIs and it means your business can take real-time, even automated, decisions.



PRICING

One of our customers faced intense competition with the competitor opening stores in near-by locations and purPOSely undercutting on price, rapidly varying those prices by product. Our retailer was able to respond from the head-office by adjusting prices in the ERP master and immediately reflecting that change across its store footprint at POS, online channels and even on the self with electronic labels.

INVENTORY

Similarly we've worked with a retailer that has established real-time alerts using an algorithm for on-shelf product availability. Now, when a shelf is empty staff are prompted to restock and re-ordering happens automatically.

CUSTOMER DATA PLATFORMS

Being able to serve and merchandise to customers based on context is critical to driving increased basket size and revenue. Insight gathered from browsing history and digital interactions should inform in-store service and sales, for example, if a customer had a terrible delivery experience last time they should be offered free delivery this time by your team in-store. Similarly, if a customer has browsed a range of paint, perhaps we should be offering rollers and brushes at the POS? The trick to achieving this is real-time exchange and availability of data between channels which isn't realistic with a legacy on-premise POS operating on a batch data load.

Creating data tunnels with APIs is the only feasible way to ensure the master data is continually updated and made available when and where it is needed in real-time to secure business agility. For example, we also worked with a retailer to enhance its product look-up and enable staff to have a product shipped to a customer's home – this sounds simple but we needed upwards of 30 APIs, or tunnels, to sub-systems to make it happen and it just wasn't possible with the previous POS.

With a single master data store connected via the cloud you might be concerned about data availability, what if there's a network issue for example? Well, as described we're not in favor of replicating data multiple times, that's what leads to duplication and integration costs. However, when it comes to critical POS data like prices and products it's possible to replicate this data locally, even within a browser, so the business can operate even if the worst was to happen. You can achieve fully offline capability with a cloud architecture.



WHY WE BELIEVE IN CLOUD POS

Let's quickly take stock of the various benefits a thin cloud POS can provide when combined with a low code platform that makes innovation simple.

- The flexibility to deliver business-change like real-time pricing, last item on shelf inventory, mobile sales teams, rapid store-opening, customer analytics and much, much more

- A single-source of master data that is easily integrated with existing legacy applications

- 75% reduction in Opex compared to legacy models, driven by infrastructure, service and license savings

- Maximise value from existing investments in ERP and other applications

- Rapid innovation in app development that isn't constrained by cost, integration or data

In summary, we think an POS should be an POS – scan the product, take the money and deliver the right messages. This leaves a path open to innovate with API-driven digital capabilities much more quickly and cost effectively.

Bohus CIO Krister Mossige, sums up the situation well:

“If you are looking for new digital capabilities they aren't likely to come from an all-encompassing POS system. We realized we already had the data and logic across our existing applications – we just needed a better way to connect it to our stores in order to innovate. Neptune and EINR give us that capability.”



About Neptune Software

Neptune Software is a global company with more than 550 customers and 2,000,000 end-users that is dedicated to empowering enterprise IT teams to drive business results. Neptune Software helps accelerate your enterprise application development projects and quickly realize your digitalization strategies— all while transforming your IT team into rapid innovation powerhouse. Neptune Software and its leading rapid application development platform (Neptune DX Platform) to help you overcome even the most daunting IT landscapes, in whatever way suits you, and quickly enable users with leading-edge apps that change the way they you do business. Visit our website at: www.neptune-software.com.