

DIGITISING DAIRY B2B SUPPLY CHAIN: EXPERIENCE FROM THE FIELD









Background

For most households in India, buying milk is part of the daily morning ritual. Usually, someone from the household buys milk and other essentials, and makes payment in cash. There are a number of stakeholders in the dairy supply chain including farmers, dairy cooperatives, distributors, and dairy booth owners. In Jaipur, the dairy board — Saras Dairy — is the apex institution that anchors this supply chain.

A small value daily purchase use case such as milk could be an ideal case to potentially bring large-scale behavior change from cash to digital, impacting every strata of the Indian population.

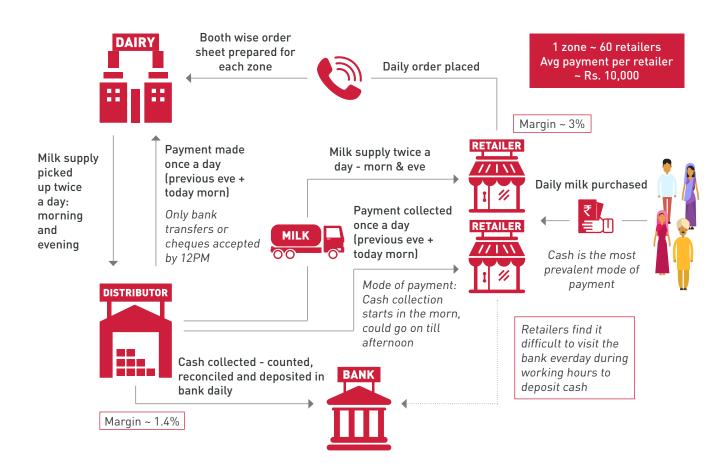
In order to promote digital payments in Jaipur, Catalyst identified sectors that impact a large population base, opportunities to improve operational efficiency of the supply chain, and strong value propositions for a sustainable business case for digital payments. Based on these parameters, the dairy supply chain was identified as a potential pilot use case and we started initial discussions with Saras Dairy in Jaipur. They ensure milk supply via around 60 distributors and through a vast network of retailers in the city that includes 750 small dairy booths and 4,000 small retail shops.



Milk supply and payments

In order to streamline milk supply, Saras has divided the city into zones with around 60 retailers in one zone and one distributor assigned with the responsibility of supply and payments collection from these booths/ shops. The distributors are assigned zones based on a bidding process, wherein the margins quoted by them per liter of milk is one of the parameters for selection.

The diagram below is a snapshot of the dairy supply and payments cycle:



For each zone, the distributors usually have 1-2 employees who manage the supply and one trusted employee for payments collection from the retailers. When talking to the retailers and distributors, we realized that this supply cycle operates like a well-oiled machine with each stakeholder playing their part efficiently. On the other hand, while the payments cycle is also well established, we realized there are a number of challenges existing in the current system that digital payments could potentially solve.

Though the supply cycle is twice in a day, payment is collected just once – cumulated for the previous evening and next morning's supply. Thus, it is a daily payment cycle from booth to distributor and to the dairy. However, while booth to distributor payments are majorly in cash, Saras accepts payments from distributors only through bank transfers or cheques. This means the distributor needs to digitize the cash that s/he collects. Additionally, this payment needs to be made to Saras Dairy by 12 pm every day.

Distributors usually have trusted employees for cash collection. The process starts at 9 or 10 am in the morning and can go on until the afternoon in some cases. Retailers often do not have access to surplus cash and need the morning sales to make up this daily payment. Sometimes the cash collection employee may need to visit the retailer more than once to collect the payments. This collected cash is then counted, reconciled, and deposited in the distributor's bank account in order to make the payment to Saras Dairy.

The distributor also needs to manage his books and maintains a record of these payments. There could be cases of minor outstanding amounts for certain retailers, which would need to be accounted for in subsequent collections. Sometimes there are changes made to the order sheet during the supply route if some retailers require more or less than their order. In such cases, these changes also need to be accounted for in the payments.

Some distributors rely on register entries that could be prone to manual errors while others maintain digital records. Even in the case of digital record keeping, the details need to be manually entered into the system by a dedicated employee post the cash collection process. This is a manually intensive task but provides an overview of the payments status and also helps keep a track of part payments or delayed payments.

Another aspect of concern in such a manual process is the risk involved. The cash collection agent is perennially under risk of assault when s/he is required to carry huge amounts of cash through a recurrent route. There was, in fact, a real-time case of assault of a dairy cash collection agent by gunfire during the month of January 2018 in Jaipur, which gave an impetus to our digital payments drive in this supply chain.



Could digital payments be the solution?

After evaluating this payment structure, adoption of digital payments seemed to be beneficial for the distributor. In an ideal scenario, one in which all retailers in a particular zone go digital, the distributor would no longer need to send an employee for cash collection. Reconciliation and follow-ups could be done sitting in the office. In depositing such large amounts of cash, the distributor also incurs cash deposit charges, which are around 0.3 percent taking the total cost of operating in cash to 0.5 percent after including employee and travel costs. This is a huge cost when compared to their current razor thin profit margin of 1.5 percent. Since their outward payments to Saras requires digital money it would be beneficial to convert their in-flow to digital as well.

In order for digital payments to create actual value for the distributor, just payments would not be sufficient and instant bank-to-bank transfer with real-time payments tracking and automated reconciliation would need to go along with it. Theoretically, the distributor stands to gain from adopting a digital payment solution, saving not only on costs associated with cash and reduction of risk but also in terms of increasing efficiency from digital collections and automated reconciliation. However, this needed to be tested. In order to test this hypothesis, Catalyst designed a pilot with one distributor in Jaipur to digitize B2B payments from retailers in their network.

The intervention design and handholding

The first step was identifying possible solution types that could be applicable to this use case. Any retailerto-distributor solution needed to be an instant bank-to-bank transfer, keeping in mind the daily payments requirement. Considering three distinct features - remote payment option, digital invoice (for retailer and distributor), and costing - UPI was identified as the most appropriate solution. Possible solution partners were identified by Catalyst and the shortlisted candidates presented their solution to the distributor. A solution provider, Paybee, was selected based on meetings and in consultation with the distributor. The decision was based on solution readiness, ease of use, costing, and investment by the solution provider. After the solution selection, it was important to design a strategy for adoption, therefore a shop-to-shop adoption drive was started by the solution provider. In order to build trust with the solution as well as the solution provider, one of the distributor's employees went along with the solution provider's team for the initial introductions.

The solution provider ensured that the retailers who were interested in adopting the solution were given thorough onboarding instructions and hand-holding was provided for an initial few transactions to ensure they were comfortable with using the solution.

The hard copy invoice shared by the distributor in the morning and traditionally used by the supply team was required to be digitized by the solution provider and sent out to the retailers for making payments. The pilot was initially started with one distributor and extended to others as the pilot progressed.

While there are enough benefits of going digital for the distributor, the retailer's story was still unclear in terms of our pitch for adoption. Our assumption was that retailers might be averse to behavior change and might prefer the status quo even if it may have challenges. However, the retailers were largely positive and many agreed to try it out, which was a welcome development.

Solution acceptability

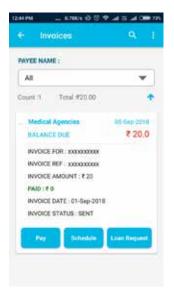
Though only around 10 percent of the retailers who adopted the solution became active users, it was interesting to see that the retailers who started actively using the solution largely continued paying through the app and did not go back to cash. Some of the factors that influenced the retailers to adopt the solution include: no cost burden on retailers, transparency in invoicing, push from the distributor, and the assistance provided by the solution provider in completing any banking formalities for successful adoption. While earlier the transactions between the distributor and retailer had a paper trail and sometimes there were disputes in payments as well, with the adoption of the digital solution all records of invoices as well as payments were available digitally to both parties; thus minimizing errors and providing referable supporting documents. One of the other

benefits of going digital as quoted by the retailers was the lack of physical interaction with the distributor's employees; as sometimes the cash collection agents made multiple visits or came to collect payments during high footfall periods thus inconveniencing the retailers. With digital payments, they now had the freedom to pay at their convenience – provided it was within the stipulated time period.

The solution provider also tweaked their application as they progressed through the pilot such as adding a feature of having multiple logins for the distributor's employees to keep track of payments but at the same time limiting their access to functions. Another upgrade was to include a call feature to make it easy for the team following up on the payments.













Critical challenges

No change comes without its share of challenges and our pilot was no different. During initial discussions with distributors and retailers, potential pain-points were identified. One of the major issues was the daily payments cycle with the added criteria of being time-bound. Other challenges to adoption included lack of smartphones, inactive bank accounts, no debit cards, and lack of mobile phones linked to bank accounts. While these issues did come up, wherever possible they were resolved on a case-by-case basis with the support provided by the solution provider to get a debit card, linking of mobile number to a bank account, or even opening bank accounts. However, since some of these were bank-related issues, the resolution took some time.

The other big challenge was related to access to digital money. While retailers were largely positive about trying out this digital payment solution, they indicated their lack of access to digital cash as one of the major issues. Our pilot essentially transferred the burden of cash digitization from the distributor to the retailers.

The retailers also only have access to cash as customers pay in cash for their purchases.

Traditionally, the retailer does not see the need to deposit the cash in his bank as all the distributors take payments in cash. Thus, most retailers do not keep sufficient balance in their bank accounts. They are neither accustomed to nor need to visit banks

frequently. While in the long run, this behavior change would build the retailer's banking as well as digital payments history – potentially making them eligible for loans and subsequently other benefits associated with financial inclusion – in the absence of any immediately visible incentives, this behavior change could be challenging.

Morning hours are the high footfall period for these retailers; and since they usually operate alone, expecting them to leave their store to deposit cash in their banks every day is not a feasible solution. The distance to the bank branch and long lines add to the time loss. Undertaking this on a daily basis will transfer the undue burden to the retailers. And without their cooperation, digital payments uptake along the supply chain is bound to fail.

Apart from the above challenges, Paybee also faced certain operational issues in the process of digitizing invoices. As usual practice, during manual processing of invoice and payments, small deviations in the stock purchase were manually adjusted on a dayto-day basis by the retailers and distributor sales agents. However, after digitization, these operational adjustments were not possible. Also, digitization largely brought down any scope for unscrupulous practices in the supply chain, which was not much appreciated by some stakeholders.

Potential solutions for retailer cash digitization

In order to digitize the retailer to distributor payments in the dairy supply chain, the issue of cash digitization needed to be resolved. While the sustainable solution is to digitize payments throughout the supply chain. i.e. from consumer to retailer (C2B) and from retailer to distributor (B2B), thus move cash entirely out of the system. This requires transformational behavioral change, which is beyond the scope and tenure of this pilot. Thus, an interim sustainable solution was essential. Taking a cue from other sectors, where cash collection takes place regularly, a third solution namely, the Business Correspondent (BC) model was evaluated. BCs are agents who operate on behalf of the bank, providing limited banking services to merchants or consumers. Within the BC model there could be two modes of operation. Under the first mode, these BCs could be located at nearby stores, which means the retailer would have to go to the BC's location and deposit money. While this method is simpler than bank visits (as the distance traveled transaction time would be lower) it still does not

resolve the issue of the retailer having to close shop to make this trip.

The other option is that the BC could visit the retailer's booth, collect the cash, and instantly deposit it in his or her account. The solution provider had discussions with many banks and agencies to explore the potential partnerships and implementation options.

Although a traditional digital solution provider would typically provide pure payments and subsequent reconciliation solutions and related value additions, in this case, they went a step further and took on this additional responsibility to put in place an effective cash digitization mechanism for retailers. This new role was operationally intensive and came with its share of risks associated with cash. However, being able to showcase the benefits of going digital as well as testing the solution itself was critical at this stage.

The next stage

Undertaking the cash collection was operationally intensive for the solution provider and could be challenging when it came to scaling up. In order to test the cash collection mechanism, the solution provider began the process informally with around 6 retailers. They needed to have a dedicated trusted employee undertake cash collection every day for these retailers, which took anywhere between 1.5-2 hours. Additionally, the costs associated with the BC model were not sustainable, keeping in mind the margins of the stakeholders involved.

During this time, the solution provider began engagements with a second distributor, who was keen to go digital. The solution provider began the adoption drive in a similar manner with one change – they would not undertake cash collection for the retailers but attempt to gain a retailer base without providing this assistance. Again, to our surprise, there were early adopters who agreed to test the solution; some even visiting the banks multiple times in a week to make deposits. However, the banks levied cash deposit charges to these retailers, which they were not willing to bear. At this juncture, Saras Dairy came out with an agreement with one of the banks in Jaipur to open zero balance accounts for the dairy retailers without any charges on cash deposits. Some retailers agreed to open their account at this bank. However, the process was sometimes time-consuming.

Consumer payments: a broken link

In an ideal scenario, to pay the distributor digitally, the retailer should receive digital money from his consumers. Unfortunately, owing to the low margins as well as the ticket size of the transaction, the possible solutions are limited and achieving a critical mass of consumers paying digitally would be an uphill task. Behavior change is a slow process and as is seen from other sectors as well, complete digital in-flow is not likely, as a major proportion of transactions would still be in cash. In order to understand the kind of solution that would suit this

high-frequency, low-value use case, Catalyst is designing a few small pilots for this segment. One of the solutions is UPI, given the retailers comfort with using this for the distributor payments as well as the bank-to-bank instant transfer feature. Other solutions being tested include biometric (Aadharbased) payments and providing digital credit records or 'Kaatha'. We hope that these short experiments will provide a greater understanding of the type of solution suitable for this use case as well as insights into ultimately digitizing the entire dairy supply chain.

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