

1st June 2022

BIAN and an approach to BNPL

16:05 - 16:30 CET

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BIAN Global Summit – June 1, 2022 BIAN - an approach to BNPL

Key messages – an approach to BNPL 4:05-4:30pm CET

Topics for today's session

- 1. BNPL A Brief Definition (from an enthusiastic observer!)
- 2. Key Roles and their Interactions
- 3. SWOT from a Banking perspective
- 4. A Possible Response as represented using BIAN

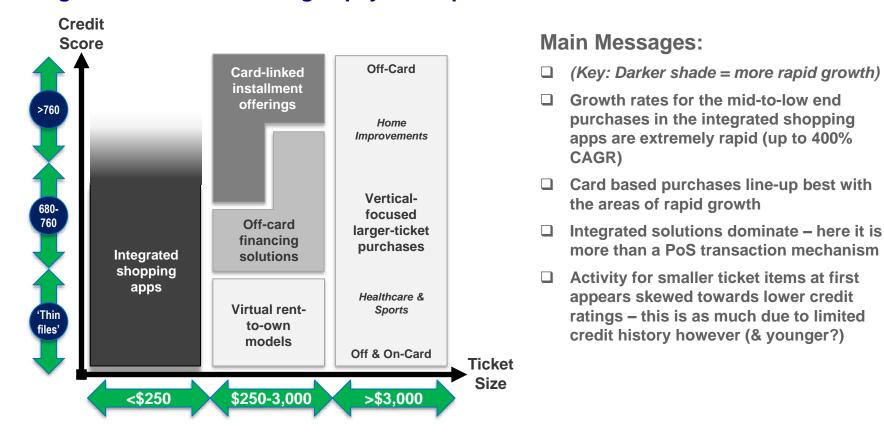


1. BNPL - A Brief Definition

Buy Now Pay Later (BNPL) – can refer to different purchasing patterns

Buy Now Pay Later (BNPL), perhaps the best known 'Point of Sale Financing' (PoS) service

BNPL and other terms such as "Pay in four" relate to products in a growing range of PoS financing solutions. All offer staged payment options with different fee/interest structures



Above is a simplified version of a McKinsey assessment of the PoS market in late 2021

Growth in the lower value purchases is accelerating, rapidly...

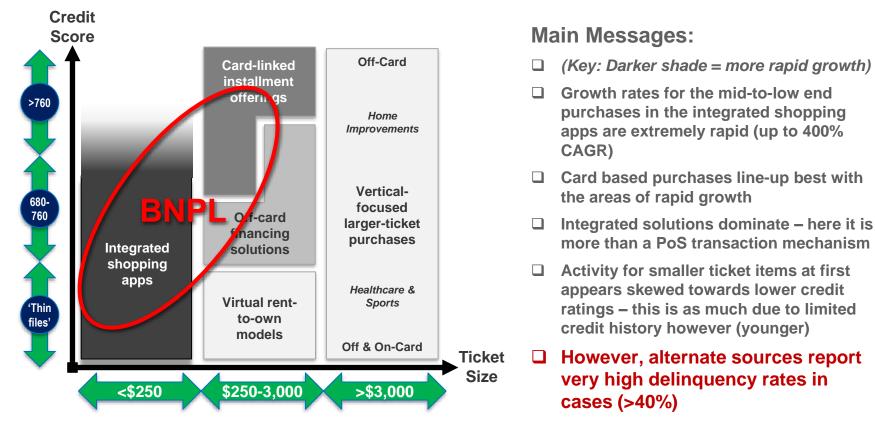


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Above is a simplified version of a McKinsey assessment of the PoS market in late 2021

Growth is off-set by the impact of encouraging unwanted behavior

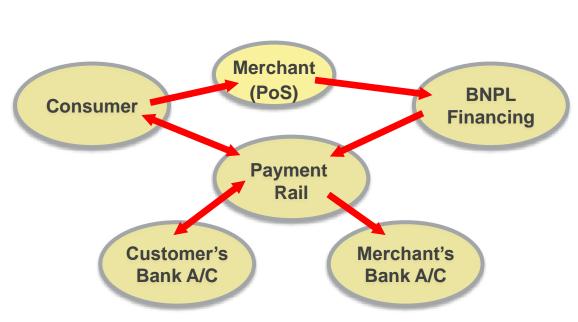


2. Key Roles & Interactions

Buy Now Pay Later (BNPL) – can refer to several different purchasing patterns

The main tasks are performed by different organizations in various arrangements

Without assigning activity to any specific financial operation, let's first identify the main functions involved in BNPL type purchasing transactions



Key roles and responsibilities:

- Consumer decides to use a BNPL/PoS purchase
- Merchant Offers BNPL purchase options, either accepting orders from the hosting marketplace or directly through their own PoS BNPL arrangements
- BNPL Financing financing discounted payments to the merchants in lieu of scheduled customer payments
- □ Payment Rail, Customer & Merchant
 Bank settle scheduled payments (both bank debit or card transactions)

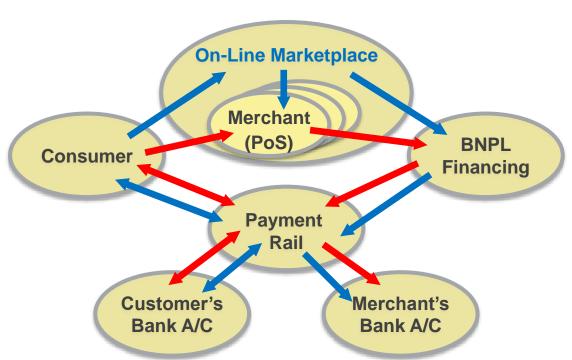


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Key roles and responsibilities:

- ☐ Consumer decides to use a BNPL/PoS purchase
- Merchant Offers BNPL purchase options, either accepting orders from the hosting marketplace or directly through their own PoS BNPL arrangements
- □ On-line Marketplace hosts multiple merchants and enables BNPL purchases (Integrated Shopping Applications)
- BNPL Financing financing discounted payments to the merchants in lieu of scheduled customer payments
- Payment Rail, Customer & Merchant
 Bank settle scheduled payments (both bank debit or card transactions)

As noted, the integrated shopping applications spanning multiple merchants are experiencing the greatest growth rates

On-line Marketplaces leverage BNPL to attract return customers

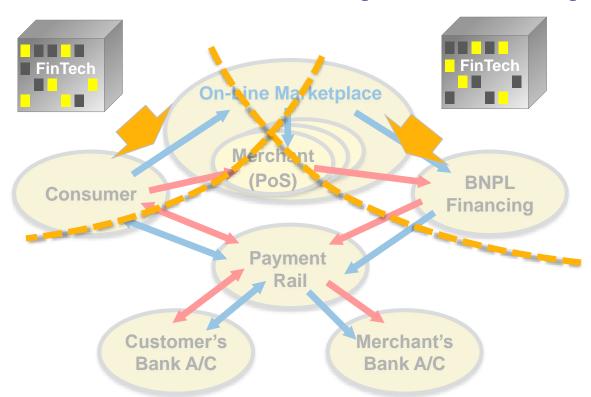


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The FinTechs are expanding their influence, leveraging their strong customer experience focus with targeted BNPL financing solutions



FinTechs expanding their customer centric solutions with BNPL specific offerings:

- Their product and service innovation leverages a deep understanding of customer behaviors and preferences
- Solutions often focus on adding flexibility and new features by 'wrapping' established banking products
- □ For BNPL they have identified an opportunity to generate sales for merchants with easy to access
 PoS financing for customers

Most solutions rely on the existing card and bank credit scoring and payment mechanisms for 'fulfillment incentives' and settlement

Fintechs play to their strengths with customer experience focus

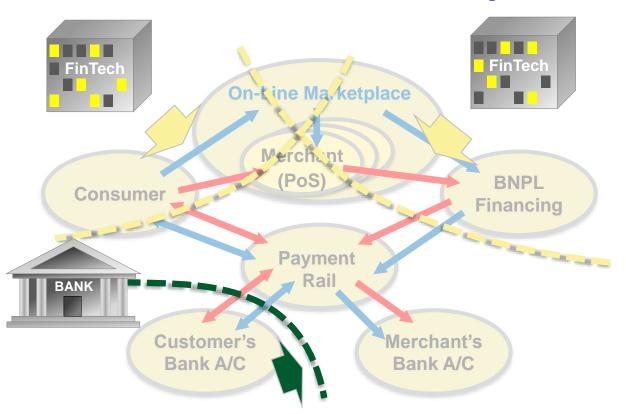


2. Key Roles & Interactions

Buy Now Pay Later (BNPL) – can refer to different purchasing patterns

The main tasks are performed by different organizations in various arrangements

In response to the Fintech push into PoS, banks can build on their existing customer foundation with targeted solutions...



Scoping possible layers of a bank's response:

The Bank has no direct involvement in its customer's use of BNPL, but might help them manage payments

Many banks were reluctant to enter the BNPL space as they thought it would encourage unwanted spending patterns. At the least they can help customers with their payments

Banks have an established platform on which they can build...

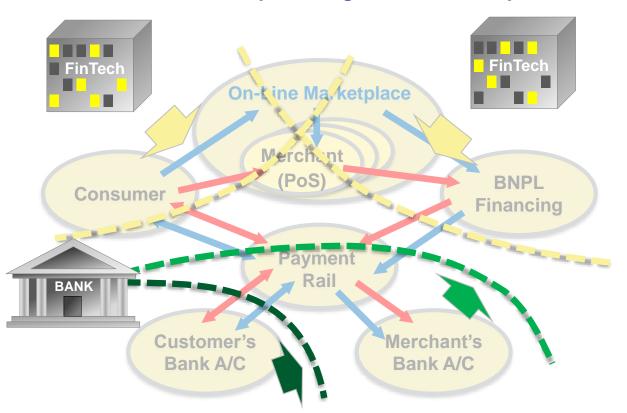


2. Key Roles & Interactions

Buy Now Pay Later (BNPL) – can refer to different purchasing patterns

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In addition to established consumer customer relations, the bank's can leverage their merchant relationships, though merchant acquisition is not always a focus for banks



Scoping possible layers of a bank's response:

- The Bank has no direct involvement in its customer's use of BNPL, but might help them manage payments
- The Bank coordinates delivery of BNPL type transactions between its consumer and merchant customers (e.g. in a merchant based customer acquisition campaign)

Banks can work with merchants, for example using the consumers' growing affinity for PoS to coordinate customer acquisition

The bank can play a greater role in the market ecosystem

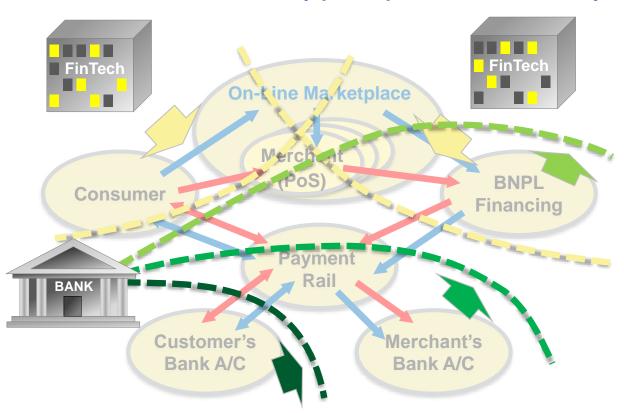


2. Key Roles & Interactions

Buy Now Pay Later (BNPL) – can refer to different purchasing patterns

The main tasks are performed by different organizations in various arrangements

As more consumers expect flexible financing models, bank's will need to have a clear view to how they participate, whether directly or in partnerships...



Scoping possible layers of a bank's response:

- The Bank has no direct involvement in its customer's use of BNPL, but might help them manage payments
- The Bank coordinates delivery of BNPL type transactions between its consumer and merchant customers (e.g. in a merchant based customer acquisition campaign)
- The bank offers BNPL type financing available through the on-line marketplace
- And probably many more...

...and their approach needs to extend beyond the payment into the marketplace

Some may even wish to compete directly in financing approaches



3. S.W.O.T - from a Banking Perspective

An informal look at the factors driving the decision making

Much stands to be won & lost if Banks respond, fail to respond or do so in the wrong way

It's a complicated space & it will only get more complicated as regulators work out how they hope to control things. As noted, late and missed payments occur at a high rate...

Some informal suggestions as seen from the Bank's perspective: **STRENGHTS** Established Relationships Credit/cash Flow Insights Funding Mechanisms Payments Processing Compliance Capabilities

Banks need to position to grow fee and interest income in response to growing consumer demand for BNPL by leveraging structural advantages they have over the new entrants

Bank's have leverage that can be applied directly

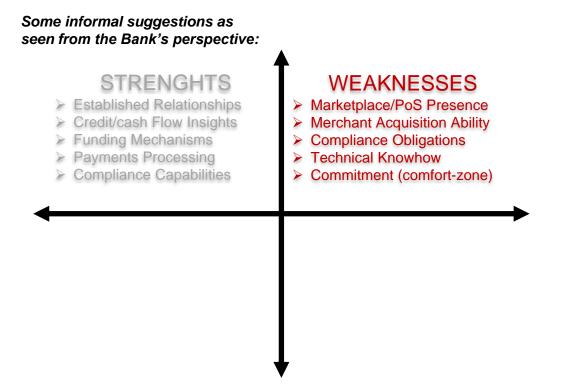


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Growing fee and interest income will however require capabilities and approaches that fall outside the traditional comfort zone for banks

Banks may need to operate outside their traditional comfort zones



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Some informal suggestions as seen from the Bank's perspective: STRENGHTS WEAKNESSES Established Relationships Marketplace/PoS Presence Credit/cash Flow Insights Merchant Acquisition Ability Funding Mechanisms Compliance Obligations Payments Processing **Technical Knowhow** Compliance Capabilities Commitment (comfort-zone) **OPPORTUNITIES** Superior Pricing/Margins Ecosystem Play/Synergies Further Product Innovation **Customer Retention &** Acquisition Cross-sell, Up-sell Campaigns

Banks have many advantages such as established relationships with an in depth financial understanding of their customers and deep product feasibility and compliance awareness

The continued evolution of PoS seems inevitable



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Some informal suggestions as seen from the Bank's perspective:

STRENGHTS

- Established Relationships
- Credit/cash Flow Insights
- Funding Mechanisms
- Payments Processing
- Compliance Capabilities

OPPORTUNITIES

- Superior Pricing/Margins
- ➢ Ecosystem Play/Synergies
- ➤ Further Product Innovation
- Customer Retention & Acquisition
- Cross-sell, Up-sell Campaigns

WEAKNESSES

- Marketplace/PoS Presence
- Merchant Acquisition Ability
- Compliance Obligations
- > Technical Knowhow
- Commitment (comfort-zone)

THREATS

- Disintermediation
- Customer Attrition
- Lost Fee/Interest Income & Share of wallet
- Payment/Account Defaults
- Reputation & Compliance

Inaction is not a good option as continued PoS innovation and its rapid adoption threaten further customer attrition. Poorly implemented solutions risk reputational & regulatory hits

With the potential up-side come many possible pit-falls



3. S.W.O.T – from a Banking Perspective

An informal look at the factors driving the decision making

Much stands to be won & lost if Banks respond, fail to respond or do so in the wrong way

Even an informal SWOT assessment highlights the many considerations, risks and also the significant potential. It also highlights that things in the space are evolving quickly...

Some informal suggestions as **Key Takeaways:** seen from the Bank's perspective: **Current largely FinTech led initiatives have** established and encouraged customer **STRENGHTS WEAKNESSES** demand for more & varied PoS financing... Established Relationships Marketplace/PoS Presence ...but 'informal' approaches have also Credit/cash Flow Insights Merchant Acquisition Ability caused high default rates. **Compliance Obligations** Funding Mechanisms Payments Processing Technical Knowhow Compliance Capabilities Commitment (comfort-zone) Bank's must decide whether the FinTech is **OPPORTUNITIES THREATS** Superior Pricing/Margins Disintermediation acquisition aspect... Ecosystem Play/Synergies **Customer Attrition** Further Product Innovation Lost Fee/Interest Income & Customer Retention & Share of wallet Acquisition Payment/Account Defaults Cross-sell, Up-sell Campaigns Reputation & Compliance

Regardless of problems, the practice is set to continue to grow, in particular in the integrated/on-line shopping arena

friend or foe, and how to tackle the merchant

...and how they can participate effectively in the integrated shopping arena

They must also anticipate a heavy response from the regulators that may change the bases for competition

... against that backdrop, let's look at how a BIAN model of banking activity can be used to evaluate opportunities and structure a pragmatic response

BNPL/PoS is not an aspect of customer behavior to ignore

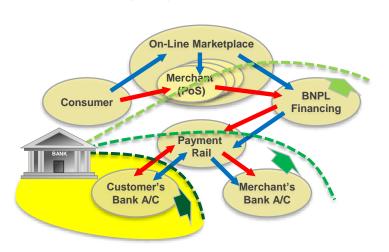


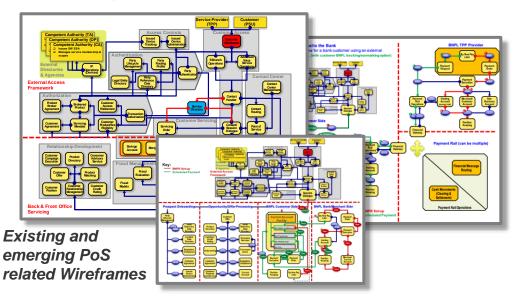
4. A Possible Response

How can Banks Respond to the Customer's Appetite for PoS Financing?

To help their customers with flexible purchasing, some simple targeted action may work

There are many layers to a possible response, today we will look at one of the easier ones





The BIAN Payment Working Group is currently developing a comprehensive payment model that considers:

- □ Different PoS/BNPL financing options & arrangements,
- Merchant/customer acquisition,
- ☐ 3rd Party integration, and
- ☐ Support for the main customer access channels and settlement payment rails

This area is a work in progress – as with much of BIAN!

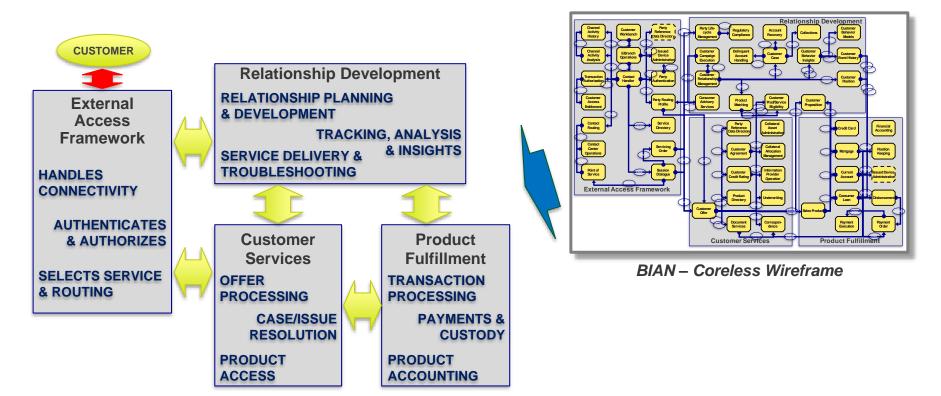


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How can Banks Respond to the Customer's Appetite for PoS Financing?

To describe a response we will use a BIAN wireframe developed for the Coreless initiatives

To scope out BIAN's series of Coreless initiatives it has helped to construct a Wireframe containing some of the more frequently engaged and interesting Service Domains...



... in particular those key Service Domains found in some 'high traffic' areas

The Coreless Wireframe was scoped to address specific aspects



4. A Possible Response

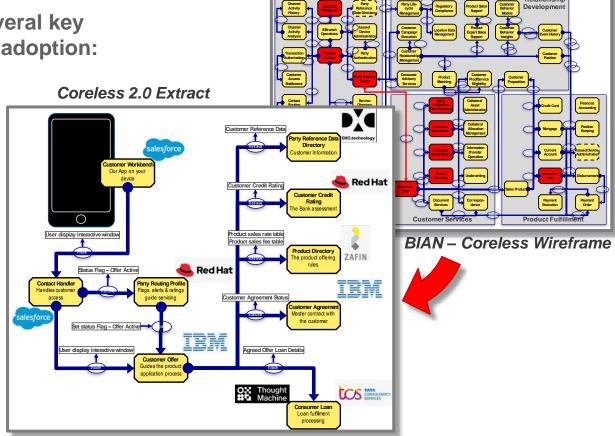
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Coreless 2.0 recently concluded with publication of the BIAN "Message Modeller"

The initiative demonstrated several key considerations and benefits of adoption:

- ☐ The components simplified collaboration between teams with standard, reusable semantic services
- □ The BIAN Message Modelling tool (by JPMChase/Virtusa) was refined in use
- ☐ The scenario included an example of EDA: business event driven notification traffic...
- ...and developed re-usable capabilities for the customer offer procedures



The BIAN member collaboration developed a generic customer offer procedure

Coreless 2.0 proved the potential and delivered key tooling



4. A Possible Response

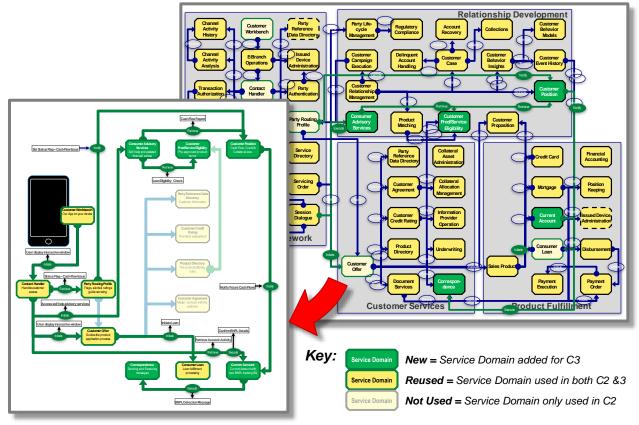
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The Coreless 3.0 candidate scenario we'll use today (of several under consideration) also extracts several Service Domains from the general purpose "Coreless Wireframe"...

This candidate scenario was originally scoped in order to:

- ☐ Re-use elements from Coreless 2.0
- ☐ Address a hot topic for Members (e.g. BNPL...)
- ☐ Include some more 'business event driven architecture' (EDA) exchanges
- □ Specifically for this scenario, expand coverage into the 'Relationship Development' zone



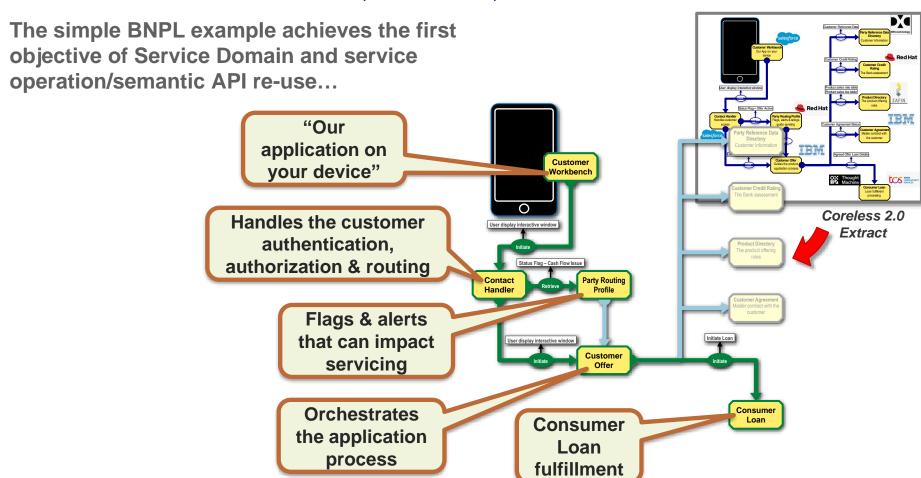


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This candidate scenario, as intended, builds on from Coreless 2.0



Re-use emerges slowly, its significance shouldn't be overlooked



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The use case starts out with a bank customer that makes an on-line BNPL purchase...

The BNPL example - Story Line:

□ Sarah uses her debit card in a BNPL purchase on an on-line shopping site
 □ Her bank detects a likely BNPL payment based on the listed payee
 □ It sends a text to offer her cash flow management services

Current Account monitors account debit activity

Detecting BNPL activity triggers a text alert

User display interactive window

Product Directory
The product Offering
rules

Status Flag - Cash Flow Issue

Contact
Handler

Party Routing
Profile

Customer Agreement
Mater control with the
customer
Customer
Offer

Correspon

dence

Consume

BNPL Detection Message



Current

Account

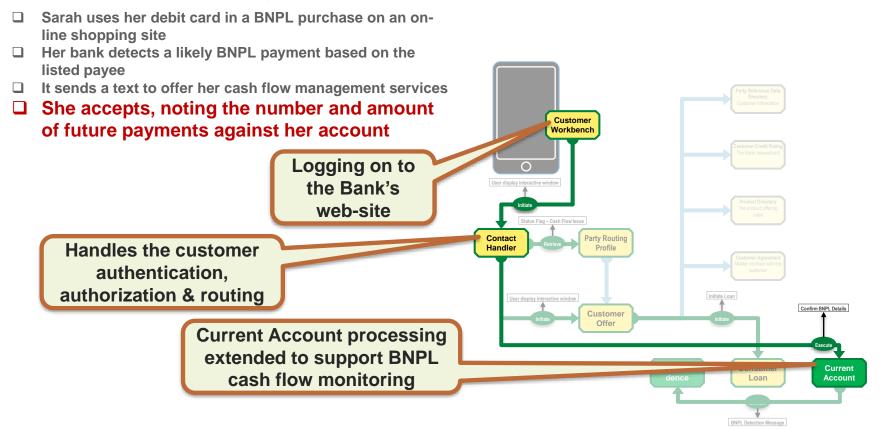
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Sarah uses a new current account facility to track and manage her future cash flows...

The BNPL example - Story Line:





4. A Possible Response

How can Banks Respond to the Customer's Appetite for PoS Financing?

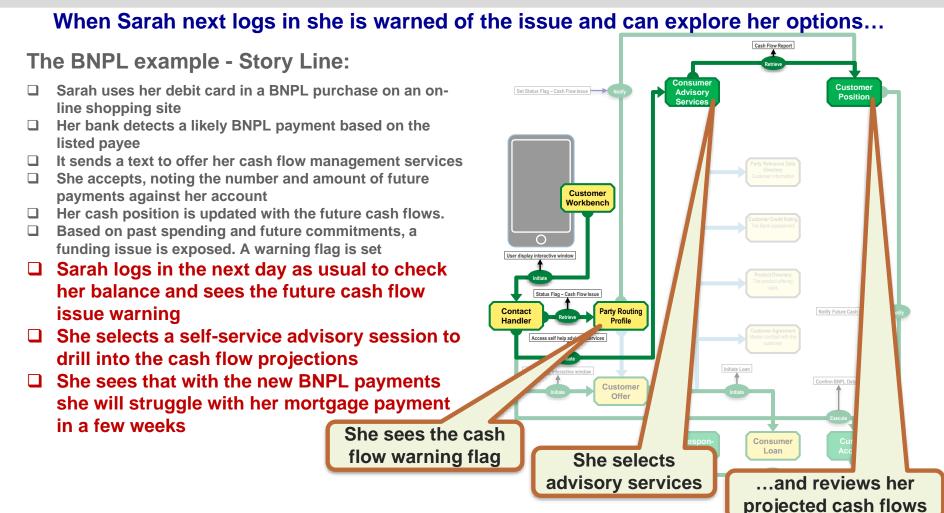
To help their customers with flexible purchasing, some simple targeted action may work

In the background, her future cash flows are modelled to identify possible issues... The BNPL example - Story Line: Sarah uses her debit card in a BNPL purchase on an on-Set Status Flag - Cash Flow Issue Notif Position line shopping site Her bank detects a likely BNPL payment based on the listed payee It sends a text to offer her cash flow management services She accepts, noting the number and amount of future payments against her account Workbench Her cash position is updated with the future cash flows. Based on past spending and future commitments, a funding issue is exposed. A warning flag is set Party Routing Notify Future Cash Flows Notif **Current Account** notifies the position monitoring service The updated cash Consume Current Account flow analysis identifies a problem... ...and so set's BNPL Detection Message a customer warning flag

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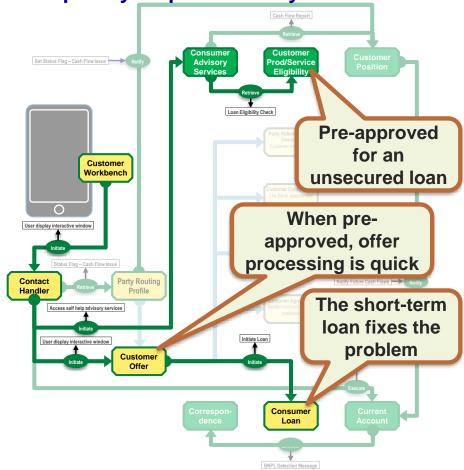
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The bank offers a quick, well priced fix that will hopefully help retain a loyal customer

The BNPL example - Story Line:

- Sarah uses her debit card in a BNPL purchase on an online shopping site
- Her bank detects a likely BNPL payment based on the listed payee
- ☐ It sends a text to offer her cash flow management services
- She accepts, noting the number and amount of future payments against her account
- ☐ Her cash position is updated with the future cash flows.
- Based on past spending and future commitments, a funding issue is exposed. A warning flag is set
- Sarah logs in the next day as usual to check her balance and sees the future cash flow issue warning
- She selects a self-service advisory session to drill into the cash flow projections
- □ She sees that with the new BNPL payments she will struggle with her mortgage payment in a few weeks
- ☐ Fortunately, as an established and valued customer, she also sees she is pre-approved for a short term unsecured loan
- ☐ The loan rate is competitive and is the easiest way to get through her cash flow squeeze
- She initiates the loan application procedure...





4. A Possible Response

How can Banks Respond to the Customer's Appetite for PoS Financing?

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It is worth highlighting the impact of three 'newer' relationship development capabilities The BNPL example - Story Line: Sarah uses her debit card in a BNPL purchase on an on-line Set Status Flag - Cash Flow Issue shopping site Her bank detects a likely BNPL payment based on the listed payee It sends a text to offer her cash flow management services She accepts, noting the number and amount of future Customer payments against her account Workbench Her cash position is updated with the future cash flows. Based on past spending and future commitments, a funding issue is exposed. A warning flag is set User display interactive window Sarah logs in the next day as usual to check her balance and sees the future cash flow issue warning Status Flag - Cash Flow Issue She selects a self-service advisory session to drill into the Notify Future Cash Flows Notif cash flow projections Handler She sees that with the new BNPL payments she will struggle with her mortgage payment in a few weeks Fortunately, as an established and valued customer, she Initiate Loan also sees she is pre-approved for a short term unsecured Retrieve Account Activity Ioan The loan rate is competitive and is the easiest way to get through her cash flow squeeze Correspon-Consumer Account Loan She initiates the loan application procedure... BNPL Detection Message The Relationship Development Service Domains highlight some newer advanced solution development opportunities

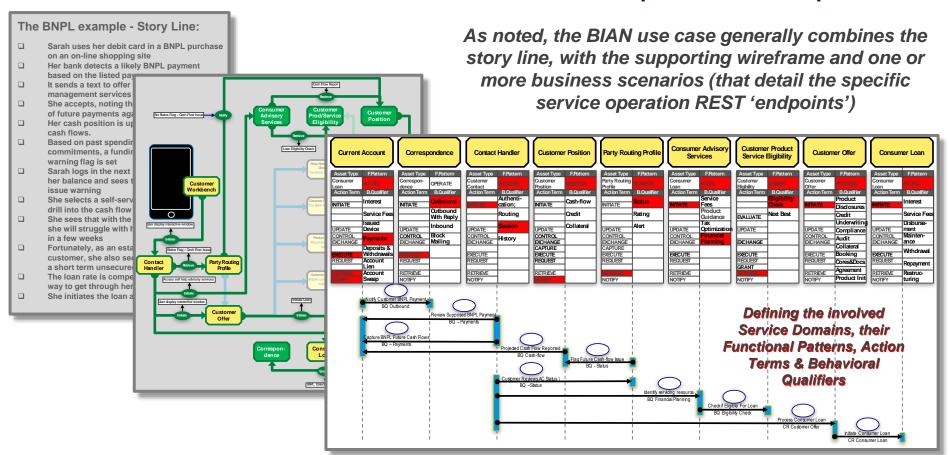
that banks are uniquely well positioned to develop

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To complete the picture, business requirements modelled using BIAN typically combine the wireframe with one or more business scenarios that map to the service operations



These elements of BIAN are the starting point for development



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CONCLUSION

With Regards to PoS and BNPL in particular:

- 1. BNPL is yet another "Canary in a Coalmine" for banks they need to respond to rapidly changing needs to avoid further disintermediation by their existing customers
- 2. Banks can learn from and are perhaps in a position to improve upon Fintech PoS innovations with their established and difficult to replace long term 'trust based' banking relationships
- 3. BNPL and other PoS approaches must be considered in the broader context of the whole integrated/end to end purchasing experience it is more than a flexible payment option. Integrated shopping platforms are already seeking to generate income as much from cross-selling and marketing activities as from the financing arrangements

& Specific to BIAN...

- 4. The BIAN 'component' model of banking can help breakdown the key elements and help structure a response to behavioral changes in the banking industry in fast moving, complex areas such as BNPL
- 5. Business flexibility and composability (supported by adopting BIAN type approaches to systems design) is only likely to continue to grow in importance





BIAN and an approach to BNPL

Guy Rackham

Lead Architect BIAN

