

Authors:

Jeffrey Abbott  
Phil Manasian

# The Modern Banking Imperative: Creating Hyper-personalized, Connected Customer Experiences

## Abstract

Today's connected customers have more choices, tools, and information than ever. Tech-savvy companies that put personalization at the heart of their business models have raised customer expectations for personalized, connected experiences and fostered consumer willingness to trade data for improved experiences. Banking customers are no exception: they now seek highly personalized and contextualized shopping and consumption experiences.

Banks that wish to remain relevant need to go beyond next-best offers and targeted marketing and deliver a more customized, relevant, and end-to-end journey. Disconnected transactions are out, connected experiences are in.

To meet rising customer expectations, banks and other consumer-facing businesses are looking to hyper-personalize customer experiences.

While marketers may think they are already personalizing or even hyper-personalizing customer engagement, chances are they're skimming the surface. Basic forms of personalization such as customizing an email with a person's name are table stakes and have minimal impact.

In contrast, hyper-personalization requires deep insights about each customer and their connected journey so that marketers can deliver the right offer to each person at the right time and place along their connected physical-digital journey. Additionally, to prepare and cope with major disruptions such as COVID-19 or other events that affect the economy and business conditions, banks need tools in place to precisely understand changes in customer sentiment and behavior in real time.

This paper explains the technology and solutions that must come together to deliver on the promise of hyper-personalization and proposes a maturity curve to help organizations incorporate hyper-personalization into their business strategy.

## Background

---

*Consumers aren't just seeking a better experience while banking- they're banking on better customer experiences.*

---

Consumers aren't just seeking a better experience while banking, they're banking on a better customer experience. Instead of buying products they expect broader value propositions such as financial advice (not just a bank account), wellness (not just health insurance), home ownership (not just a mortgage), rewards (not just a credit card), and a source of personal finance advice (not just a bank).

Consider the hyper-personalized, connected banking experience of "Ben", a mid-level executive currently living in an apartment who has a good credit score. By leveraging customer data and data collected through its partner ecosystem, his bank was able to construct a more granular customer profile of him, assess his specific needs and deliver a much more personalized experience.

In fact, the bank noticed his salary significantly increased and determined that he recently received a promotion. That would enable him to become a homeowner, so the bank proactively teed up a pre-approved offer to purchase his first home through Ben's preferred communication channel, leading him to respond favorably. As Ben navigates the mortgage process, the bank connects him with trusted real estate agents and appraisers that partner with the bank, which makes the buying experience smoother and easier. Later that same year, by screening Ben's spending habits, the bank infers he is now a parent and offers him a tailored savings plan to secure his child's future education.

As this example demonstrates, hyper-personalization can make a greater impact when interactions with a brand feel logically connected. Instead of random, disjointed offers and opportunities, successful banks that take charge of the customer journey are designing connected customer experiences.

Further contributing to the consumer's shifting focus to experiences is that comparison shopping for financial products and services is now quick and easy to do at scale. This makes product and price less effective strategies for differentiation. With customer experience surpassing price and product as a primary driver of loyalty, it's become critical for banks to grow and differentiate their business.

## Personalization vs. Hyper-personalization: What's the difference?

---

*While marketers might think they are personalizing or even hyper-personalizing customer engagement, chances are they're skimming the surface.*

---

Like other industry buzzwords, not everyone agrees on the definition of hyper-personalization. Personalizing means to make something personal. Within a banking context, an existing customer receiving tailored offers based on past transactions or a bank offering a student loan to a certain customer because she falls under an age group are examples of basic personalization. Yet such one-dimensional approaches are so common that they no longer provide a significant competitive advantage.

In the previous hyper-personalization examples involving our banking customer, Ben, the bank didn't need to know Ben at a deep level, or need sophisticated insights about him such as his unique preferences, buying or broader consumption patterns, shopping priorities or his particular stage of the buying journey. That's because effective personalization can happen with as little as one data point, although its impact is limited by the lack of context behind a particular customer situation. In fact, the inability to understand context is why many attempts at basic personalization fall flat, leading to irrelevant offers, generic messaging, and disengaged customers.

In contrast, hyper-personalization takes personalization to a whole new level:

1. **Personalized to the individual:** The business must interact with an audience of one, with a rich understanding of the consumer, including information such as: demographic (age, gender, life stage, location, marital status, etc.), financial situation (loan, savings, credit card debt, credit score), behavioral preferences and affinities (for brands, product categories, services, etc.), sentiment (feelings about past experiences, brands, products, and services), transactional history (habits, hobbies, lifestyle), spending patterns and consumer type (impulsive, loyal, need based), loyalty membership status, etc.
2. **Providing the right context behind the situation:** Banks needs to tailor offers and actions using a contextual understanding of what the customer is trying to achieve (their overall goal) and where they currently stand on their physical-digital journey. Banks should understand whether a customer is still researching financial products or is ready to buy. They should understand the customer's interactions to date, and the next actions that are most likely to favorably influence their experience and behavior. A hyper-personalized experience usually includes integrated digital-physical interactions. Furthermore, the interactions should be delivered via

the right combination of a customer's preferred channels (whether that is by phone, email, text, mail, website, mobile app or at a local branch).

3. **Timely:** Personalization is useless if it happens after the fact. Banks need to anticipate the specific needs and desires of each customer in order to deliver timely recommendations. Providing recommendations that are contextual, relevant and timely will build loyalty and strengthen relationships with each individual customer. Note that timely doesn't necessarily mean real-time (triggered by data in milliseconds to as long as five minutes). In marketing, the most important aspect of timing is that the response to an input happens at the most opportune time given the customer's situation. That could be in seconds, minutes, days or even weeks.

From a bank's perspective, key differences between personalization and hyper-personalization include:

Banking Perspective	Personalization	Hyper-personalization
Data Requirements	Low	High
Analytic Complexity	Low	High
Need for Real-time Insights	Low	High
Situational Contextualization	Low	High
Multi-channel Engagement	Low	High
Experiential Impact to Customer	Low	High

From a customer's perspective, key differences include:

Customer Perspective	Personalization	Hyper-personalization
Relevance of Offers	Low to moderate	High
Connected Experience	Low	High
Continuity of Brand Interactions	Low to moderate	High
Customer Satisfaction	Low	High
Brand Loyalty	Low	High
Respect for Privacy and Communications Preferences	Low	High

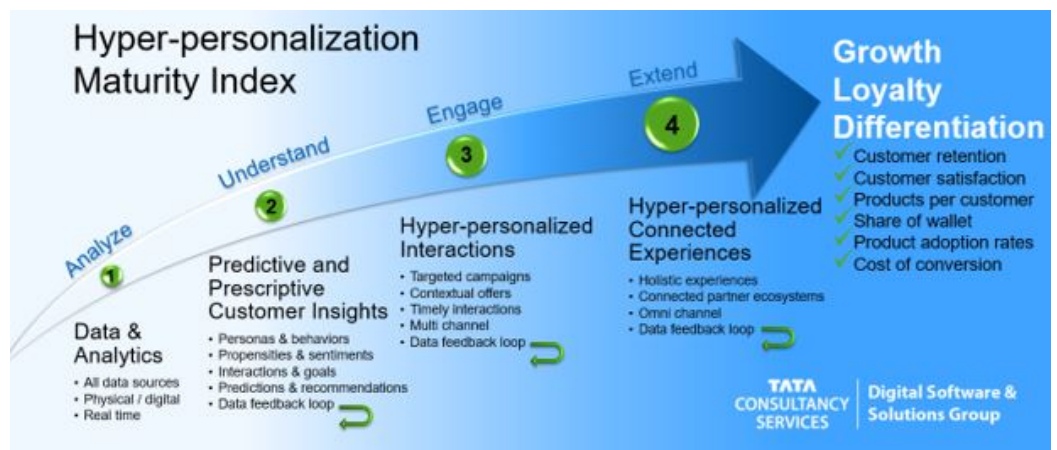
What about data privacy and security? Although not the focus of this paper, robust data privacy and security are a prerequisite for hyper-personalization. Misguided attempts at hyper-personalization can make consumers feel "creeped out" when they feel that a brand is violating their privacy or knows too much about them.

Consumer confidence in an organization's ability to keep their data secure and only use it in their best interest is called digital trust. Any breach of digital trust can result in a backlash, causing some consumers to seek anonymity by opting out of promotional offers, disabling location-based services on phones, blocking cookies, unplugging smart speakers or paying only with cash.

These sensitive issues have prompted new data privacy regulations such as GDPR in Europe and the California Consumer Privacy Act in the U.S., which offer consumers “the right to be forgotten.” This ensures consumer information is deleted from vendor databases. Earning and maintaining digital trust is a top priority for businesses that want to collect consumer data for hyper-personalization. Maintaining digital trust is not only an imperative. It’s an opportunity to increase trust and relevance to customers through hyper-personalization a business grade solution for customer analytics that complies with data privacy best practices and requirements.

## Hyper-personalization Maturity Index

Below are the key steps to drive growth, loyalty and differentiation through hyper-personalization:



### Phase 1: Data and Analytics: It All Starts with Data

At the beginning of the Hyper-personalization Maturity Index is ‘Data and Analytics.’ Surprisingly, many banks remain stuck at the first step waiting until they completely solve complex master data management and data governance challenges, often a result of M&A activity. Yet banks often don’t realize that they have large amounts of quality data at their disposal that could be leveraged to drive personalization and a better customer experience. Rather than wait they should move in parallel on personalization and governance.

Banks also continue to experiment with data lakes as they confront data management challenges. However, too often there are not clear business use cases behind their efforts.

Hyper-personalization, via AI and augmented analytics, focused on very specific, business-driven use cases can unlock the logjam. While most banks realize that sophisticated analytics capabilities are required to compete in today’s connected economy, they often believe that they lack access to the kind of quality data necessary for powerful personalization. The truth is that banks can begin to deliver meaningful and compelling personalized experiences by using their existing data, despite how limited they fear their

data set is. In most cases banks will have decent data for at least a portion of their customers. Delivering lift for that portion can close the ROI gap and allows banks to boost Net Promoter Score (NPS) and engagement immediately.

Most banks already have some of the building blocks needed for customer analytics. However, few are using cross-domain analytics to incorporate physical and digital customer interactions. This is an imperative and a promising opportunity for any traditional bank committed to delivering hyper-personalized experiences to their customers.

### **Phase 2: Predictive and Prescriptive Insights: The Elusive Link Between Data and Action**

Phase 2 is the unsung hero in the Hyper-personalization Maturity Index, solving the hardest analytics challenges for businesses. The problem is not that they lack analytics tools or don't have enough data. According to eMarketer, Inc.<sup>i</sup>, in a 2018 survey by customer experience agency Verndale<sup>ii</sup>, 84% of respondents agreed that the technology's potential has not been fully realized, 91% acknowledged that their company needs to improve its personalization capabilities, and more than half said that their organization "often fails to deliver the personalization...customers crave." The respondents agreed that they need more real-time data and domain-specific insights; it's not due to a lack of marketing automation.

Phase 2 requires domain expertise about banking KPIs and marketing initiatives. It requires data scientists (or pre-built data science driven solutions) to look across data sources for predictors of performance. It also depends on application developers who can build analytics use cases that deliver actionable insights able to be consumed by third party systems. Such systems could include dynamically discoverable customer personas (which serve as a foundation on which to develop and deliver personalized offers), customer scores (customer satisfaction scores, customer lifetime value, credit scores), segmentation tools, product affinities, customer journey monitoring, next-best-offers, and next-best actions. Lastly, it requires integration to incorporate the resulting recommendations into apps, websites, chatbots, marketing automation, and other front-line systems.

### **Phase 3: Hyper-personalized Interactions: Delivering Prescriptive Recommendations in the Moment**

To hyper-personalize interactions, banks must provide fine-tuned insights and recommendations across all channels customers use. The message must be delivered at the right time, through the right channel and to the right customer. Banks with event-based marketing capabilities can target customers based on financial and life events to deliver the most pertinent offer. Having the ability to automatically discover data-driven customer personas and scoring is critical to delivering a customized, 1-to-1 experience to each customer. Providing relevant, contextual and timely messages to customers is what allow banks to build enduring and lasting connections with them, which can deepen loyalty and ultimately improve the bottom line.



Hyper-personalization also provides a prime opportunity for banks to increase the value of customer-facing staff at branches. Using AI to augment human intelligence on the front line can enable tellers, relationship managers and call center agents to offer insights and recommendations in the right context so that they are relevant to a customer's individual goals, situation and preferences. This is especially important for small and medium sized banks as well as credit unions, whose advantage are deep customer relationships. For them, hyper-personalizing interactions supercharges the front line and helps them to scale.

Imagine a front-line bank employee immediately realizing that an unsatisfied customer is about to leave, or leveraging a life event such as parenthood to take the next-best-action for the situation. Or, giving pertinent financial advice based on behavior and propensity modeling. Leveraging data, artificial intelligence and machine learning to offer a best in class experience -- not by displacing human interaction but by empowering it -- can provides true differentiation for banks by building trust and loyalty, while separately them from ones that will fail.

Each of these systems represents an opportunity for a bank to interact to solve problems, to deepen and widen customer portfolio values, and to learn. Yet to delight customers, a bank must empower every interaction with prescriptive guidance to deliver the right message at the right time to each customer. Unfortunately, this is where banks often get stuck, since most personalization efforts currently rely on siloed data sets.

For the majority of banks, there are too many sources of data and points of interaction to fully understand, manage and optimize the right customer offers, actions and reactions in a timely fashion -- continuously -- for each customer. While many organizations have siloed solutions to personalize particular activities, the most promising opportunity is to treat the entire customer life cycle as a holistic, integrated, and ongoing experience.

#### **Phase 4: Hyper-personalized Connected Experiences: The Sum is Greater than the Parts**

Delivering hyper-personalized, connected experiences results in increased growth, loyalty and differentiation. We see many examples of brand partnerships where related businesses team up to offer holistic experiences. These connected partner ecosystems enable banks to team up to deliver new, experienced-based value, enhancing the customer experience and loyalty while driving incremental value for the bank. They also create opportunities to collect valuable customer data which feed the analytics, driving insights and recommendations that further hyper-personalize customer experiences.

Take Chase Bank, which partnered with United Airlines to offer a cobranded credit card, giving Chase access to valuable customer travel data. If a customer who enjoys upscale dining experiences were to travel to Paris, Chase could send, using advanced analytics, a personalized message upon arrival with a recommendation from a top restaurant (which is a Chase partner). Based on past transactions, Chase could also determine that she enjoys health treatments. Given that the customer is staying at a Chase



partner hotel chain, discounted spa package could proactively be offered. These valuable, contextually relevant moments create a fruitful opportunity for banks and partners to deepen customer relationships and increase the customer's lifetime value to the bank.

The value of such partnerships goes beyond offering customers exclusive experiences. They also give banks access to additional data that can be used to refine customer profiles and personalize the overall banking experience at a more granular level. Most importantly, these insights can be used to orchestrate a banking experience around a life event such as buying a car or a house or becoming a parent -- which makes for truly compelling, connected experiences. Information collected through partnerships allows banks to develop insights about their customers that can be used to create highly targeted outreach and respond to consumer needs in ways that align with their preferences and consumption patterns.

Delivering these experiences requires predictive and prescriptive data insights that augment the intelligence of the front line systems and stakeholders that interact with customers. These insights must be developed around a holistic understanding of the customer, reflecting their goals, behavioral patterns, sentiment, propensities, and buying history – across all digital and physical channels. This is Connected Consumer Intelligence. Without it, hyper-personalization and connected customer experiences are not possible.

### **The Outcome: Growth, Loyalty and Differentiation**

---

*The practice of hyper-personalization is no short-term fad like the hula hoop--it is becoming a strategic imperative for every long-term banking growth plan.*

---

Hyper-personalized, connected experiences are becoming a leading priority to attract, keep, and expand a bank's customer base. But customer experience is not "the new black." That would be selling it short. The practice of hyper-personalization is no short-term fad like the hula hoop – it is becoming a strategic imperative for every bank's long-term growth plan. Laggards risk becoming casualties of the digital revolution, while leaders take market share at alarming rates.

Importantly, business leaders are successfully leveraging these capabilities to understand customer goals and provide contextual offers and broader value. This often requires collaborating with third party partners to offer more differentiated holistic experiences, rather than just products (such as providing personal finance advice instead of just a bank account). Banks able to achieve a high level of hyper-personalization can influence on-line consumer buying behavior by displaying product or services that are contextually relevant, truly valuable and timely. Superior experiences translate into greater loyalty and differentiation as well as improved customer satisfaction.

Mid-sized banks can fast-track their path along the Hyper-personalization Maturity Index to stay competitive against born-digital newcomers as well as tier 1 banks, to drive long-term growth, customer loyalty and differentiation.

## Implementation Approaches and Considerations

Providers of CRM tools, customer data platforms, analytics platforms, marketing automation tools, or banking point solutions have been quick to jump on the “we have a customer experience (CX) solution” bandwagon. But not everything is as it seems. Each bank has unique needs and constraints. Since a customer experience solution is inherently complex, banks face a myriad of considerations that affect TCO, time-to-value, and overall benefits. These include:

- Being future proof
- Comprehensiveness
- Vertical specificity
- Architectural flexibility
- Service requirements
- Maintenance
- Required in-house skill sets
- Scalability
- Security and privacy

## No Matter the Solution Approach, Future-Proof Now

Data analytics is a long-term initiative that becomes integral to core business models. Starting with a future-proof foundation is critical because it helps spare organizations from retooling their systems to fully realize the potential of their data. This requires a foundation that:

- Handles vast amounts of data with a highly scalable architecture
- Ingests and processes data from a wide variety of sources, including customer interaction from physical stores, websites, apps, IoT, and streaming/real-time sources
- Includes advanced analytics and capabilities such as AI and machine learning, with predictive and prescriptive insights, and required management and security to operationalize use cases
- Connects easily to third party systems and partners to enable connected experiences
- Is cognizant and capable of helping an organization comply with privacy requirements

When considering a hyper-personalization solution – which range from proprietary vendor solutions and open source reference architectures, to home-grown and hybrid solutions -- keep these considerations in mind:

### Approach #1: The Platform Vendors

The infrastructure giants, major ISVs, and major consultancies usually have a “yes we can” answer and it’s often true. They may have access to the hardware, software, expertise and skill sets to deliver anything, for a price. However, to deliver a solution which is tuned for banking customer analytics,

these vendors may have to dig deep into their generic parts bins to create your solution. This often takes many months, or more. It could also require a significant services engagement to build and integrate data models and analytics use cases that are specific to banking, and to tie together disparate solutions into a cohesive whole. Other drawbacks can include vendor lock-in, repeated upsells for additional modules, and mandatory maintenance contracts.

Consideration checklist:

Given the considerations above, while the major platform vendors offer solutions which can appear comprehensive, they may require 'heavy' services to integrate disparate products which can negatively impact time-to-value and TCO. Depending on the level of integration, this can trigger the need for additional services in the future to maintain and update the solution. It is also important to consider vertical market specificity. Beyond the marketing and industry "skin" that may have been added to a horizontal platform, banks should ensure that substantive, industry-specific use cases are baked in – otherwise additional services, time and cost for both the bank and the vendor may come into play. Finally, banks should be wary of dominantly proprietary architectures with limited architectural flexibility, which can compromise their ability to leverage existing IT investments.

### **Approach #2: The Niche Vendor**

On the other side of the spectrum are the "We do one thing really well" vendors. Their proprietary point solutions tend to be well polished but can struggle to integrate with other tools and systems. They may help build personas, provide product recommendations or visualize customer journeys, but they often fall short when they need to become a part of a comprehensive hyper-personalization solution straddling physical and digital touch points. Given their specialty focus, these point solutions often fail to capture the entirety of customer experiences and profiles, hampering hyper-personalization from the start.

Consideration checklist:

Examining the considerations above, niche vendors can fall short. Their specialization means that they may be able to deliver certain outcomes quickly, but they can fall short on comprehensiveness. Services costs (and time) may rise as banks incorporate additional point solutions and try to weave them together into a holistic solution. Maintaining disparate solutions as one can also be costly and complex. This is in particular true as multiple solutions need to be upgraded over time, or when finger pointing starts between vendors which are only responsible for a portion of the total solution.

This approach can also impact skills requirements as banks seek to use and maintain multiple proprietary solutions. And while point solutions may earn high scores for vertical specificity, many best-of-breed analytics solutions were not originally designed as vertical solutions with known business outcomes. In addition, using multiple niche vendors can multiply consulting and services costs and time. Doing so can also add unnecessary complexity, complicating security and privacy, scalability, and the need to be future-proof.

### Approach #3: Homegrown

Some larger banks have slowly, over time, developed their own tools and widgets to “get by.” However, as the volume, variety and velocity of big data continue to increase, the same tools can become less effective, while maintenance and support costs rise. Coupling these challenges with the fact that customer expectations for personalized experiences are rising, homegrown approaches may deliver diminishing returns. In addition, only the largest banks have the in-house skills and resources to build and deploy customer analytics use cases capable of delivering hyper-personalized interactions.

Consideration checklist:

Banks should be careful that homegrown solutions are future proof and don’t become a one-time project that quickly becomes outdated, inadequate, and incompatible with other systems. They should avoid reinventing the wheel when proven solutions can lead to value faster through a pre-integrated approach. Maintenance requirements are also often overlooked with homegrown solutions. Banks must factor in the skill sets and time costs of keeping systems up-to-date with their quickly evolving needs. Furthermore, maintenance can become a catastrophic problem when key skill sets and tribal knowledge leave an organization. Finally, homegrown data platforms are more vulnerable to rapidly-evolving threats to security and privacy. That makes it critical that banking and customer data are protected from current and future threats. With the rising concern over data privacy, banks should look for solutions capable of customizing data privacy policies, adding control points, creating alerts and building reports. Given how quickly new threats emerge, banks should be prudent when it comes to deciding when to buy a solution versus building one in-house.

### Approach #4: Hybrid

As brick-and-mortar banks consider solutions for hyper-personalization, Connected Consumer Intelligence should be at the top of their “must have” list. To accelerate the time to value while setting the stage for the future, banks should seek an analytics platform which includes [pre-built customer analytics use cases designed for banking](#) such as customer personas, product affinities, channel selection, voice of customers, etc. With this in place, banks can quickly, easily, and affordably deliver hyper-personalized, connected experiences across all physical and digital touch points – incorporating partner offers that deliver differentiated holistic value. Banks should seek flexible solutions that leverage existing IT investments and insist on subscription-based pricing to lower the barrier to entry. Among the most important considerations, the vendor must bring proven banking industry experience and integrity to the table.

Consideration checklist:

Proven vendors, with enterprise customers, future-proof their solutions by maintaining detailed product road-maps that help them continuously adhere to the five guidelines mentioned above (section: No Matter the Solution Approach, Future-Proof Now). These road-maps incorporate current customer demands, bug fixes, value-added features and

accommodations for developing risks and threats. These vendors may also offer more proven, enterprise-grade data foundations that help ensure that big data doesn't become a big problem.

To help ensure comprehensiveness, the hybrid "platform plus pre-built use case" approach solves the needs of the bank while fast-tracking time-to-value. Banks should be mindful of horizontal platforms that have been dressed up in a thin industry "skin" but which may add little business value. Instead, they should insist that substantive industry use cases are baked into the solution. A well-designed hybrid approach has architectural flexibility, which appeals to banks by avoiding vendor lock-in and allowing them to leverage existing IT investments, reducing costs and simplifying implementation.

Banks should seek a low-code solution with familiar open-source components to minimize the need for specialized skill sets, with included APIs and data connectors. This hybrid approach can avoid lengthy and costly service engagements by offering out-of-the-box readiness. While the cost of maintenance must be factored in, banks should consider that it relieves them of a significant burden on IT resources. Since this approach tends to only be available through established enterprise vendors, solutions are more likely to offer better scalability, security and privacy features.

### **Summary**

Disruption is hitting banking from all sides. Today's connected, omni-channel consumers have instant on-line access to a global financial marketplace. They increasingly expect highly-personalized experiences at every step of the customer journey.

Newcomers such as born-on-the-Web banks are undercutting prices and providing fast, free services with higher returns and reduced transactions fees. Meanwhile, traditional banks are facing reduced customer loyalty and lower margins.

To stay competitive and drive growth, loyalty and differentiation, brick-and-mortar banks - need to hyper-personalize customer engagement and deliver superior, connected customer experiences.

When considering solutions to enable hyper-personalization, banks must be cautious to avoid long timelines, disparate point solutions and expensive rip-and replace mega-platforms. An outcome-based approach that combines a data and analytics platform with pre-built use case solutions tuned for banks provides the most effective and fastest results.

---

### **TCS Digital Software & Solutions Solution for Hyper-personalization in Banking**

[TCS Customer Intelligence & Insights \(CI&I\)](#) software for banking delivers pre-built customer analytics use cases that accelerate a bank's ability to deliver hyper-personalized experiences and timely engagement campaigns across physical and digital channels while minimizing total cost of ownership. Ingesting customer data from all available sources (internal, external, IoT, real time, etc.), such as demographics, transactions, and

interactions, the software uses AI-driven analytics to create rich customer personas, reveal deep customer 360 insights, discover and analyze customer product journeys, and recommend timely, next best actions for real-time customer engagement.

The low-code CI&I Banking platform features an integrated Hadoop data lake and incorporates open-source components, machine learning, real time and IoT capability, an adaptive analytics engine and built-in privacy and security features in a future-proof solution for banks. APIs simplify integration with third party and front line customer-facing systems, apps, websites, marketing automation, etc. Importantly, users can incorporate their own analytic models to build and operationalize additional use cases.

**To Learn More:**Visit: [dss.tcs.com](https://dss.tcs.com)Email: [tcs.dssg@tcs.com](mailto:tcs.dssg@tcs.com)Blog: [dss.tcs.com/home/blog](https://dss.tcs.com/home/blog)**About TCS Digital Software & Solutions**

TCS Digital Software & Solutions delivers on the promise of Connected Consumer Intelligence. Our experience working with the world's most successful enterprises drives the development of integrated software that helps them meet the higher expectations of today's wired consumers and citizens. With TCS Digital Software & Solutions, organizations can design experiences that logically connect every touch point of the consumer's digital and physical journey.

**About Tata Consultancy Services Ltd (TCS)**

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at [www.tcs.com](https://www.tcs.com)

All content / information present here is the exclusive property of Tata Consultancy Services Limited (TCS). The content / information contained here is correct at the time of publishing. No material from here may be copied, modified, reproduced, republished, uploaded, transmitted, posted or distributed in any form without prior written permission from TCS. Unauthorized use of the content / information appearing here may violate copyright, trademark and other applicable laws, and could result in criminal or civil penalties. **Copyright © 2020 Tata Consultancy Services Limited**

**Citations**

eMarketer, Inc: <https://www.emarketer.com/content/many-marketers-haven-t-realized-personalization-s-potential-yet>  
Verndale: Solving for CX: 2018 Customer Experience Survey <https://www.verndale.com/insights/solving-for-cx>