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THE IMPACT OF OPEN BANKING ON TRADITIONAL BANKING INSTITUTIONS IN INDIA

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A R T I C L E I N F O.	Abstract
Keywords: banking, open, traditional, application, programming, payment, customers.	The banking and finance sector has started undergoing a lot of change since the start of the digital revolution and 'Open Banking' is one such disruption that is poised to change banking forever.
	Open Banking is a mandate that requires banks to share certain account and transaction details with third parties through Application Programming Interfaces (APIs). The APIs allow software from different companies to have access to certain information from another. Open Banking also allows banks to quickly offer tailor-made products to their customers, particularly in the case of payment offerings.
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INTRODUCTION

In October 2015, the European Parliament brought about the Revised Payment Service Directive (PSD2) and with it, new types of banking services that use new ways of making payments. By August 2016, the UK Competition and Markets Authority (CMA) asked nine of the biggest banks in the region to share certain transactional data with third parties.

In India, open banking made way to the Unified Payments Interface (UPI). Several banks such as YES BANK, ICICI, RBL Bank, Kotak Bank, DCB Bank, and several others have adopted API based banking services to perform several processes like integrate with ERP systems in corporate banking, perform eKYC, verify PAN, display forex rates, and so much more.[1,2,3]

Most of the open banking initiatives worldwide so far cater mostly to the B2C segments because it plays a big role in improving customer experience and bringing new products and services that are relevant in a digital age. However, providing similar offerings in the corporate banking space is an extremely lucrative space. Since corporate banking relies on several systems to carry out their transactions, facilitating straight through processing would significantly improve transaction times. Finding a mean path where APIs run securely without any compromise of data will be the sweet spot for companies looking at serving the corporate banking segment. A lot of them are now using real-time data to offer more customer-oriented solutions such as viewing cash flows in real-time, online invoicing of customers, almost instantaneous reconciliation of bank accounts amongst others through platform-based ecosystems that interact with a bank on need basis.



Open banking is removing barriers between competitors and bringing about a collaborative environment that will eventually lead to better financial services. This has also led to the rise of FinTech in the recent years.

However, it should be noted that sharing financial data between different systems also mean that the parties having access to this information should be extremely cautious of data breaches. Getting user consent is becoming the norm in a lot of countries around the world and by giving users control over their financial data they can switch between service providers of their choice as and when they please. As a result, banks now need to function like the high tech companies of today where customer focus is top priority. This is the only way they will be able to engage their customers effectively and stay relevant in the digital age.

DISCUSSION

Market competition, innovation and more compelling services for end users are an integral part of open banking foundations. In contrast, traditional banking used to impose stark offerings on consumers only a few years ago. Although customers seem at the centre stage of this financial data revolution, there are plentiful growth opportunities for every party involved.

Open banking has paved the way for better financial products and services, tailored to the specific needs of customers who now have access to more efficient ways of potentially changing their lives – business loans, mortgages, home loans.

In open banking, opportunities come from the large amounts of data owned by financial institutions, most of it stored instead of being used to drive innovation. Traditional banks have always been very conservative, since they benefited from the fact that they had exclusive access to their customers' financial data.

Modern regulations changed this, by pushing for the sharing of this precious information in order to promote the development of better products and services. These offerings were designed to help end users instead of acting like an additional obstacle to their real life needs.[4,5,6]

One thing to always keep in mind is the fact that customers always have to consent to this data sharing. This is an indispensable requirement to access that works as a first security layer, paramount to the success of those operations.

Open banking? What is that?

Perhaps now is a good time to revisit the concept of open banking. It refers to the process of sharing customer financial data through a secure network, composed of several financial institutions. This can only be executed with the customers' express consent.

In short, this allows regulated third-party providers to gather information to create superior products and services that rely on better insights to enable an improved experience for all parties involved.

This is why many commentators got their predictions wrong about open banking being the end of legacy banks. Open banking was not designed to end traditional banking, but instead as a powerful ally to help legacy institutions modernise and catch up with an ever-changing financial market.

Businesses like GoCardless can use open banking technology to offer innovative new solutions to customers, making it easier to deal with processes such as invoicing, payments and helping to maintain cash flow.

The risks of open banking

All of this does not imply that there are no risks to open banking. After all, the best opportunities come from overcoming challenges. Regulated open banking markets may face some difficulties, as some requirements can make it hard for the market to grow and change.

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It may brake a lot of effort for companies to come up with new and better products and services while following rules like PSD2. But, companies that don't follow these rules may not be able to compete and could lose customers to businesses that do follow the rules and offer more transparency.

But with opportunities come benefits, and there is no shortage of those in open banking for financial institutions, businesses, and customers alike.

Open banking benefits for consumers

Open banking is growing at a very fast pace, particularly in Europe, where the concept was born.

It's always wise to ask two important questions when analysing its impact:

- ✓ Will consumers embrace open banking?
- \checkmark How will they benefit from it?

These questions have already been answered in many ways. Consumers are already embracing open banking, and reaping the benefits of this technology that is keeping financial products and services up-to-date with today's financial needs.

In recent years, people have understood that by sharing their bank account data, they are enabling thirdparty providers to use that information to help them create tailored products and services that remove old barriers and make everyone's lives easier.

Below, you'll find some important benefits of open banking for the everyday user. These showcase what is already available to consumers, as well as some of the possibilities for the future.[7,8,9]

Control over your financial data

Open banking legislation was created with the aim of giving customers an absolute control over their financial information.

For example, the use of modern APIs makes sure that your login details and passwords are only accessible to you.

Even better, the customer has absolute control about who can access their banking data, and is able to decide the level of access. This makes sure that only relevant information is at the third party's disposal.

Since open banking also promotes new ways of paying for products and services, companies are unable to take payments without the customer's say-so.

Smarter personal finance management

Through account aggregation, open banking is capable of displaying data from multiple bank accounts in one streamlined view or application.

We live in a time when it's common for people to have more than one bank account, which can make it hard to have full visibility into each of them.

This is not ideal, as it may impede a true understanding of one's financial health, leading to unforeseen expenses, loan rejections, and even unexpected maintenance fees.

The data collected from this unified view can be used by third-parties, with explicit customer permission, to recommend better financial products and practices. This includes recommendations about better credit card options, or even loans that are adjusted to your earnings and expenses that can really help you achieve your goals.

Relevant financial data can be used to provide customers' with tips on how to save money, without disrupting your daily habits. You can even access recommendations about where to place those savings,



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if your goal is maximising returns — be it through investments or interest.

Tailored financial products and services

Today's world is considerably different from the one our parents grew up in. People have different needs, so one-size-fits-all financial solutions can prove far from ideal.

By tapping into multiple accurate data sources, open banking can help companies better understand their customers and come up with products and services designed to meet particular needs.

Open banking technology is capable of providing more options for customers to choose from, optimising the customer's experience and overall results.

Instant online payments

Open banking also revolutionised the way we pay for products and services online. This was particularly important during the COVID-19 pandemic, but it's something that is here to stay. [10,11,12]

If account information promotes access to banking data in order to help us regain control of our financial lives, payment initiation allows for safer and more convenient ways of completing our online purchases.

Customers are used to paying with credit or debit cards, but we've all come to realise that these are only convenient, until they're not. Mistakes with this kind of payment methods can lead to considerable headaches. Also forgotten, lost, expired and stolen cards are definitely not convenient!

Open banking payments can be compared to instant bank transfers, with a much lower failure rate and the possibility of instant settlement. As if this wasn't enough, the adoption of open banking payments can also mean the end of preposterous fees.

Since OB transactions are completed almost in real-time and obey high security standards, there is a lot less room for anxiety as we are sure that our money went to the right place.

Payments have to go through Strong Customer Authentication (SCA) protocols, which helps reduce fraud by adding an important extra step to the authentication process: usually this involves a redirect to one's bank application, and the user only has to confirm the transaction — no credential sharing of any sort!

Open banking benefits for businesses

We have discussed the impacts and benefits of open banking for consumers, but what does this new technology really mean for businesses?

Every business can take advantage of open banking, but it's safe to say that small and medium-size enterprises (SMEs) are the ones that can leverage it to gain the biggest benefits.

Main benefits of open banking for businesses

Open banking can help small businesses by providing access to financial services and data that they may not have had access to previously. This can include things like payment processing, financial analysis, and other services that are typically only available to larger corporations.

Here are some of the main benefits that businesses – especially SMEs and businesses who take online payments – can reap from adopting open banking services:

Efficiency: it's pretty evident that in today's economy, growing a small or medium-sized business is not an easy task. There is a lot of financial micromanagement involved, from accounting to payroll, and open banking can help: by facilitating access to relevant financial data. Entrusting third-party

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providers with these tasks, owners can funnel their resources to other key areas, such as marketing and customer experience.

A clear overview of your finances also lets you run your business and plan for change much more effectively. In simple terms – the more data you have, the better you can plan in detail and spot inefficiencies and opportunities. Open banking solutions allow you to centralise all the available data on your business finances in one place, and analyse this data with a variety of tools to glean insights. [13,14,15]

- Automation: digital automation is a must in today's world, and can be achieved by easily accessing data via integrated open banking systems. Automation is very cost-effective in the long run, not to mention its importance in a digital-first world.
- Innovative solutions: unlike established banking institutions, open banking providers are not limited to traditional methods. Access to new sources of financial data allows them to respond much more quickly to digital innovations. As a business, you can also react at speed to changes in demand from your customers, such as the recent shift to payment options such as digital wallets and Apple Pay. Open banking, combined with a payment platform such as GoCardless, enables these quick reactions.
- Easier access to loans: open banking technology makes it easier to build accurate credit risk assessments for your business. The more accurate your credit reporting on your business, the easier it becomes to access the credit you may need to maintain cash flow or boost investment. Open banking technology brings all of your financial information together in one place, making it simpler to go to lenders and seek funding.

Moreover, it accelerates loan eligibility screening, by eliminating manual submission of financial statements and other documents. Everyone involved saves time and resources, easily getting to what matters the most;

Light-speed payments: even the most popular payment methods – such as debit and credit card transactions – take time to be processed and land in your account. This makes it difficult to monitor your cash flow and to build funds to re-invest in your business. Open banking technology allows GoCardless in the UK to offer the faster alternative of Instant Bank Pay. It lets you take one-off payments quickly, seamlessly and securely. The payments go directly from bank to bank, cutting out the middlemen and making the process as frictionless as possible.

At the same time, these payments are typically 54% cheaper than card transactions made online. The process consists of just three steps:

- \checkmark You send a payment request to the customer
- \checkmark We connect them to their bank, and the customer authorises the payment
- \checkmark The payment is instantly confirmed and settled

The lack of time-consuming steps such as entering payment details makes this the ideal process for oneoff payments, removing complications which result in customers leaving items in the basket finalising the purchase.

- Reduced costs and fees: open banking helps merchants reduce their service fees, as it doesn't require them to rely solely on card payments. Open banking payment APIs remove transaction fees and most operational costs;
- Higher conversion rates: a well-designed checkout flow, something often present in open banking payment solutions that offer multiple options, can definitely improve customer satisfaction, and therefore reduce shopping cart abandonment, which translates to more sales and more revenue;

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Greater customer experience: this is a topic that many do not take seriously enough, resulting in a negative impact on how a brand is perceived by consumers. Open banking helps businesses deliver a more positive customer experience, by biometrically securing mobile banking payments instead of asking for login details.

Access to more relevant data also allows merchants to better understand their customers' needs, and therefore offer more relevant products and services – making for a customer-centric approach that is paramount in today's economic landscape.

Open banking benefits for banks

We have seen that open banking delivers multiple benefits for both businesses and consumers. Let's now look at the traditional financial institutions and discuss the benefits that open banking offers to legacy banks.

Whenever change arises, people tend to show some resistance to it, or at least think: who will win and who will lose during the process.

When it comes to open banking, traditional banks are often seen as being on the losing side of the equation. This is mainly because the monopoly they had for decades on consumer financial data came to an abrupt end with the introduction of the revised Payment Services Directive (PSD2). [16,17,18]

With that, the European Union set in motion a regulatory framework that allowed the financial markets to evolve swiftly, and as we have seen this meant traditional banking institutions were no longer the sole players in the market. FinTech's quick development and newly gained access to crucial data allowed them to challenge incumbents by offering paradigm-shifting technology, paving the way to several new products and services.

Open banking and traditional banks: two peas in a pod

Banking has always been a very competitive ecosystem, even before open banking was a "thing". In order not to get left behind and maintain relevance, traditional banks have always had to experiment with new technologies, despite some resistance to change.

With open banking, things aren't really that different. It's just a matter of taking better advantage of the same instruments they have been using for a long time, spicing it up with modern APIs that allow a customer's financial service providers to safely communicate with each other.

How can banks and other financial institutions leverage open banking?

Open banking wasn't designed exclusively to benefit consumers and businesses. Other financial institutions, such as banks, can also leverage open banking to improve their offerings.

Here are some of the benefits that traditional banks can reap from open banking:

- Collaboration is key: the financial world is ever-changing, additionally we have seen a global pandemic transform the way people think about banking, money, and life in general. If in the past there was some rivalry between incumbent financial institutions and FinTechs, today we can look at partnerships as a way to keep customers engaged. Traditional banks who choose to do so have a competitive advantage, and multiply their potential to keep up with emerging solutions that are much more attractive to the common user;
- Customer-centric experience: competition shouldn't be a bad thing. Innovation in the financial space led a lot of traditional banks to develop engaging mobile applications and improved online banking experiences. Digital transformation and a customer-centric approach are crucial to develop customer engagement and satisfy the needs of existing and prospective users;



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- New tech means better products and services: open banking levelled the playing field for new players in a market that was previously exclusive to legacy banks. As a result, traditional banks never felt the urge to innovate, something that changed with the introduction of FinTechs that were rapidly developing and implementing innovative financial solutions;
- More data, better decisions, more revenue: opening relevant financial data to third-parties improves everyone's ability to make informed decisions in a timely manner, including banks'. Better predictive models can have a decisive impact on strategy, and this is true for FinTechs and traditional banks alike;[19,20,21]

There is just no way we can ignore the powerful benefits of open banking for the financial markets and the economy as a whole.

Recent events changed the way people think about finance forever, and the whole industry had to adapt. FinTechs have proven themselves as a credible alternative powered by digital evolution, and traditional banks simply can't let the opportunity pass to extend and improve their offerings through open banking technology.

Traditional banking is changing, and is surely changing for the better. Consumer trust is on the rise, and an increasing number of institutions are adopting open banking as a way to ensure sustainable growth.

Open banking: next-gen digital services that benefit everyone

This new era of financial data sharing allows even smaller companies to compete on the same playing field as their bigger counterparts.

All of this translates to a new generation of financial services, especially in the digital space, that have the potential to:

- ✓ Reduce costs and time by streamlining legacy procedures;
- ✓ Enhance reliability by introducing zero-trust cybersecurity protocols like Strong Customer Authentication (SCA);
- ✓ Aggregate several accounts in one place for a better overview of your overall financial situation;
- \checkmark Provide data that can be used to upgrade the decision-making process;
- ✓ Improve risk assessments, which can positively transform the lending industry;
- ✓ Quickly make and receive payments, removing unnecessary costs;
- \checkmark Increase customer satisfaction, boosting retention and monetisation;

This constant stream of new information grants the power to develop greater products and services that address the specific needs of individual customers and even whole markets.

Everyone wins, from the typical consumer to the businesses striving to get awesome products to the market, not forgetting traditional banks that can modernise procedures and present themselves as credible alternatives to FinTechs.[22,23,24]

RESULTS

Disruption is the new buzzword in the financial services arena. Nowadays, it seems that the monetary landscape is constantly shifting, with new trends emerging and changing the face of banking. In the recent past, banks were the gatekeepers of people's financial data, and they facilitated almost all exchanges of money.

Now, however, new technology has given rise to a multitude of fintech start-ups that are challenging banks, payment platforms, monetary policies and customer relations. In a world that's increasingly



digital, traditional banking platforms are fast becoming obsolete. Leading the charge of disruption is the proliferation of cryptocurrencies and alternative payment methods.

Another significant disruptor on the horizon is open banking. Deloitte's 2016 report *Banking Reimagined* identified a growing trend towards eliminating middlemen and dismantling the borders between institutions and users.

The report claimed that we're heading towards a future of trading without traders, investing without managers and transacting more directly through an 'extended ecosystem' of banks, third-party vendors, fintech firms and payment platforms.

As a result of continually evolving digital connectivity and institutional collaboration, the concept of open banking has materialised as an inevitable disruption in the financial world.

But what is it exactly?

Wide open

Open banking relies on the use of open-source application programming interfaces (APIs) that connect computing systems together through a shared digital language.

The idea is to increase transparency and accessibility for customers, while facilitating third parties – such as challenger banks, fintech firms, software developers and payment platforms – to build financial applications.

It's a world where accountants, auditors and shareholders would have direct access to transactional data, and banks would move away from insular frameworks. The end result would significantly benefit the end user – the consumer – because the combination of smart data and smart systems would be able to, for example, recommend the best type of bank account and most suitable institution according to your financial history and behaviour.

Open banking is the biggest change to the system since the invention of the chequebook

Henry Chesbrough, Head of the Centre for Open Innovation at the University of California's Haas School of Business, coined the term that became the name of his centre, and has written extensively about the topic.

'Open innovation' ascertains that companies need to become less insular and look beyond their own house to cultivate new innovations that will grow their business and enhance their services for end-users.

Chesbrough's philosophy is based on the central idea that knowledge is not exclusive to a single entity, but exists in employees, consumers, competitors and third-party contractors.

Chesbrough's ideas have taken flight and found their way into the banking sector as open banking. Financial institutions are increasingly finding themselves cornered, as consumers demand a holistic banking experience and increased access to third-party resources.

The US' Mint app is a prime example. Developed in the late 2000s, Mint provides an overview of consumers' finances by amalgamating their banking history into one place.

The demand from consumers was so great that, less than two years after its launch, Mint was registering 7,000 new users on a daily basis; it now boasts over 20 million. However, fintech start-ups like Mint are still powerless against the regulated banking establishment, which is where open banking comes in.[24,25,26]

The doors of innovation

While the financial world was arguably blindsided by the rise of cryptocurrencies, preparations for open banking are now in full swing. Europe and the UK are leading the charge, with software companies like

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TESOBE in Berlin forming the Open Bank Project as a source of open APIs and third-party apps for banks to utilise.

In the UK, the Competition and Markets Authority (CMA) has commissioned an open banking initiative to bridge the gap between new banks seeking to increase their clientele and more established ones that are not competitive enough.

In September 2015, the Open Banking Working Group (OBWG) was set up at the request of the UK Treasury to explore how data could be used to help people transact, save, borrow, lend and invest their money.

Through the research and work of the OBWG and other establishments, such as Sir Tim Berners-Lee's Open Data Institute, an open banking standard has surfaced. According to these institutions, the open banking standard is expected to come into full effect in 2019.

On July 5, the CMA publicly released a list of API specifications for accounts, transaction information and payment initiation. Imran Gulamhuseinwala, a trustee of the Open Banking Implementation Entity, said on its website: "The specifications provide the platform for developers... to build new web and mobile applications that will deliver a safer, more personalised, and easier banking experience for consumers."

This framework was developed in tandem with the payments API, which is scheduled to go live in January 2018, and will allow third parties to "create secure payments on behalf of customers and submit payments for processing".

Open banking has become such a topic *du jour* that the SWIFT Institute commissioned a case study, resulting in a comprehensive research paper entitled *The API Economy and Digital Transformation in Financial Services: The Case of Open Banking*. Published in June 2017, and available to download from the SWIFT website, Markos Zachariadis and Pinar Ozcan's investigation shows how challenging, yet inevitable, the new system is.

They conclude that open banking is a priority for banks and financial institutions looking to expand their clientele. "Those who move early to establish an attractive platform will obtain a customer base that is increasingly unwilling to switch to competitors, as more and more third-party developers offer services as part of the platform," according to the report.

In fact, 2018 is gearing up to become the year of open banking. The EU's revised Payment Services Directive (PSD2) was passed in November 2015, and is expected to take effect in January 2018. It will give third-party, non-banking firms, including online retailers, the access to handle payments for customers with bank accounts directly and securely.

What will be fascinating to see is how this new response to open banking will be impacted once the General Data Protection Regulation (GDPR) comes into play on May 25, 2018. This new regulation will replace the old data directive that has governed Europe since 1995.

The aim of the GDPR is to unify EU regulations in ways that will place control of personal data on a customer level, and simplify the ways data is stored, shared and transacted within and without the EU.

What's the catch?

As passionately as open banking proponents sell the concept, the reality is that its future is muddied by unknown factors. How banking establishments that have functioned for generations will feel about sharing their *modus operandi* with young fintech start-ups and software developers is a question mark that casts a long and crooked shadow over the entire transition.

For open banking to truly work, these powerhouse banks need to commit fully to Chesbrough's ideal of openness, even with competitors – not something they're especially famous for.[27,28,29]

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Then there's the regulations of the online data-sharing world; with PSD2 and the open banking standard moving ahead, regulators are obviously adapting and taking notice of the shifting landscape, but how long before the average consumer feels fully assured that their money is secure and private?

In a digital world where cyber warfare can be waged and hackers have the savvy to break through online barricades, sending sensitive financial data directly to third parties through APIs may feel scarier than going down to your local branch and dealing directly with the teller.

Even in view of the multitude of unknowns within the sector, however, experts are sure that open banking is the future. Perhaps those who are feeling weak at the knees over this eventuality should look to the Royal Bank of Scotland (RBS) for reassurance.

RBS is embracing open banking, assessing how APIs can help it engage with its customers, as well as how it can transform its in-house organisation. Alan Lockhart, Head of Open Banking and Fintech Solutions at RBS, claims that every bank will have to come to terms with open banking, whether they like it or not, because, as he told CNBC: "[It's] the biggest change to the banking system since the invention of the chequebook."

This new approach to how financial data is handled, stored, transacted and dispersed is arguably a game changer for any company that deals with payments, in any shape or form. Brokers like FXTM, for example, which thrive on keeping clients active through a regular flow of deposits and withdrawals, will undoubtedly get in on the open source API action.

CONCLUSION

Emerging markets will also benefit from open banking. Countries in areas such as Latin America and Africa, where many people do not have bank accounts, are a prime target for this technology. [30,31,32]The ability to identify financial products tailored to individual needs could, potentially, increase access to mortgages, credit, and investment opportunities.

From the ways customers fund their accounts, to the connectivity of various platforms, the possibilities this innovation offers are endless. Whatever your industry, focus, or market, an open future is certainly starting to look like a brighter future.[33,34,35,36]

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