From PayPal to Stripe:

Automated reconciliation and accounting for collection and payment platforms

Embat

The **reconciliation and accounting integration of payment platforms** — such as PayPal, Stripe, and Adyen — as well as traditional point-of-sale (POS) terminals, has become a critical task for finance teams in medium and large enterprises.

The increasing volume and variety of transactions have rendered manual processes outdated, introducing inefficiencies and raising the likelihood of **errors in financial records.**

This white paper explores how automating the reconciliation process for these platforms enables finance teams to **manage large transaction volumes with agility**, detect discrepancies in real time, and **strengthen accounting integration**

1

How banking reconciliation can improve financial decision making

Automated banking reconciliation represents a revolution from contemporary financial management, providing businesses with essential tools to optimise their financial decision making.

This process, that traditionally happened manually, has always been laborious and prone to errors. However, thanks to technology, it has become an efficient and precise and, of course, strategic practice

Below, we will analyse in detail how automated banking reconciliation improves financial decision making in today's business environment.

The importance of banking reconciliation

The importance of banking reconciliation resides in its capacity to validate the financial health of a company. It provides an independent verification of **the effectiveness of internal controls related to cash transactions,** a critical asset for any business. In addition it complies with audit requirements and financial regulations, thus avoiding potential penalties of legal issues.

Banking reconciliation is a complex process and, worst of all, susceptible to numerous errors if performed manually, due to wrong data entry, transaction omission or simply due to a high volume of data to be reconciled.

Moreover, **reconciliation consumes a significant amount of time** for human resources, time that could be better spent on tasks that generate greater added value for the company.

Example of banking reconciliation

Business "XYZ" is undergoing its bank reconciliation for the month of September. The accounting records show a cash balance of €10,000, while the bank statement shows a balance of €9,500, so it is important to detect errors.

In the bank reconciliation process, a check issued for €600 is discovered **that has not yet been deducted by the bank** (recorded in the books but not reflected in the bank). Also, a bank charge of €100 for services that has not yet been recorded in the company's books is identified.

In other words, an outstanding account credit of €600 and an unrecorded bank debit of €100 have been found. At the end of the bank reconciliation, the following entries are recorded:

Balance in the books after adjustment:

10.000	-	100	=	9.900€
Initial balance		Bank charge		

Balance in the bank adjusted for the undiscounted check:

9.500	+	600	=	10.100€
Initial balance		Bank charge		

In this case, taking into account the two transactions, the bank reconciliation is completed and the bank accounting balances are matched.

The need to automate the bank reconciliation process

Faced with all these challenges, bank reconciliation, far from being an added value, **is a necessity for companies seeking to optimise their financial operations**, especially in everything that has to do with their cash flow.

This automation is interesting for various reasons:

Automated transaction matching

Automated solutions quickly and agilely compare a huge number of transactions, identifying matches and mismatches accurately and efficiently.

Moreover, sometimes, generative artificial intelligence, such as the one we have implemented in our Embat accounting and reconciliation functionality, further improve this accuracy, relating such receipts and payments with previous forecasts of movements in the accounts, performing an automatic accounting of such movements in the ERP.

Discover more about Embat

Proactive identification of errors and mismatches

Automated systems can alert the users to discrepancies in real time, allowing a quick resolution of the problems before they affect financial reporting.

Integration with banking and accounting systems

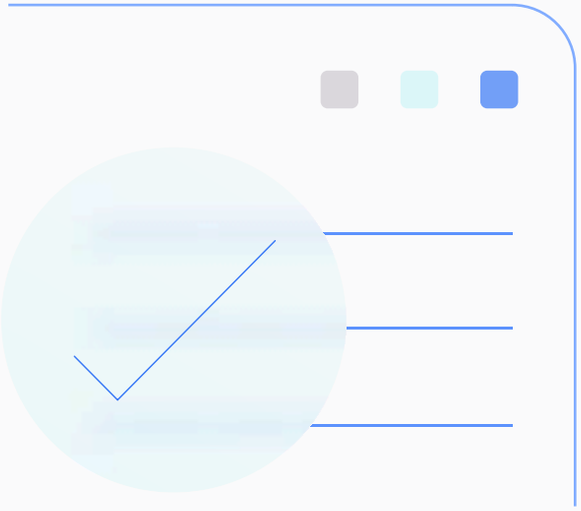
The capacity to integrate directly with the banking systems and accounting platforms reduces the necessity of manually inputting the data, decreasing the risk of human errors. This enables near real-time integrity to be maintained across all of a company's systems, including its ERP.

Improved processing speed

What used to take several days to complete can now be accomplished in a few hours or even in real time, freeing up valuable resources for other tasks. Instant information improves financial decision making, especially in a department as important as treasury.

In the example above, in a scenario where the banking reconciliation is automated, **the platform would have automatically imported and compared** the transactions from the accounting records and the bank statement. The system will immediately identify both the undiscounted check and the unrecorded bank charge, alerting you to these discrepancies without the need for detailed manual review.

In addition, the functionality of bank reconciliation could be notified about the financial discrepancy before completing the process, allowing for quick and efficient correction. This approach not only saves significant time but also improves the accuracy of financial records, contributing to more effective financial management and informed decision making based on accurate and up-to-date data.



Bank reconciliation and decision making

The adoption of automated bank reconciliation has a direct and significant impact on a company's ability to make informed financial decisions.

Some of the most significant benefits include:

Improved visibility

Automated reconciliation provides a clear and up-to-date view of the company's cash position, allowing you to identify trends and manage cash flow proactively.

Early detection of problems

The immediate identification of discrepancies allows them to rapidly address the problems, from internal errors to fraudulent activities, thus protecting the company's assets.

Compliance and audit

Automation facilitates compliance with accounting regulations and simplifies the audit process, reducing the risk of penalties and improving investor confidence

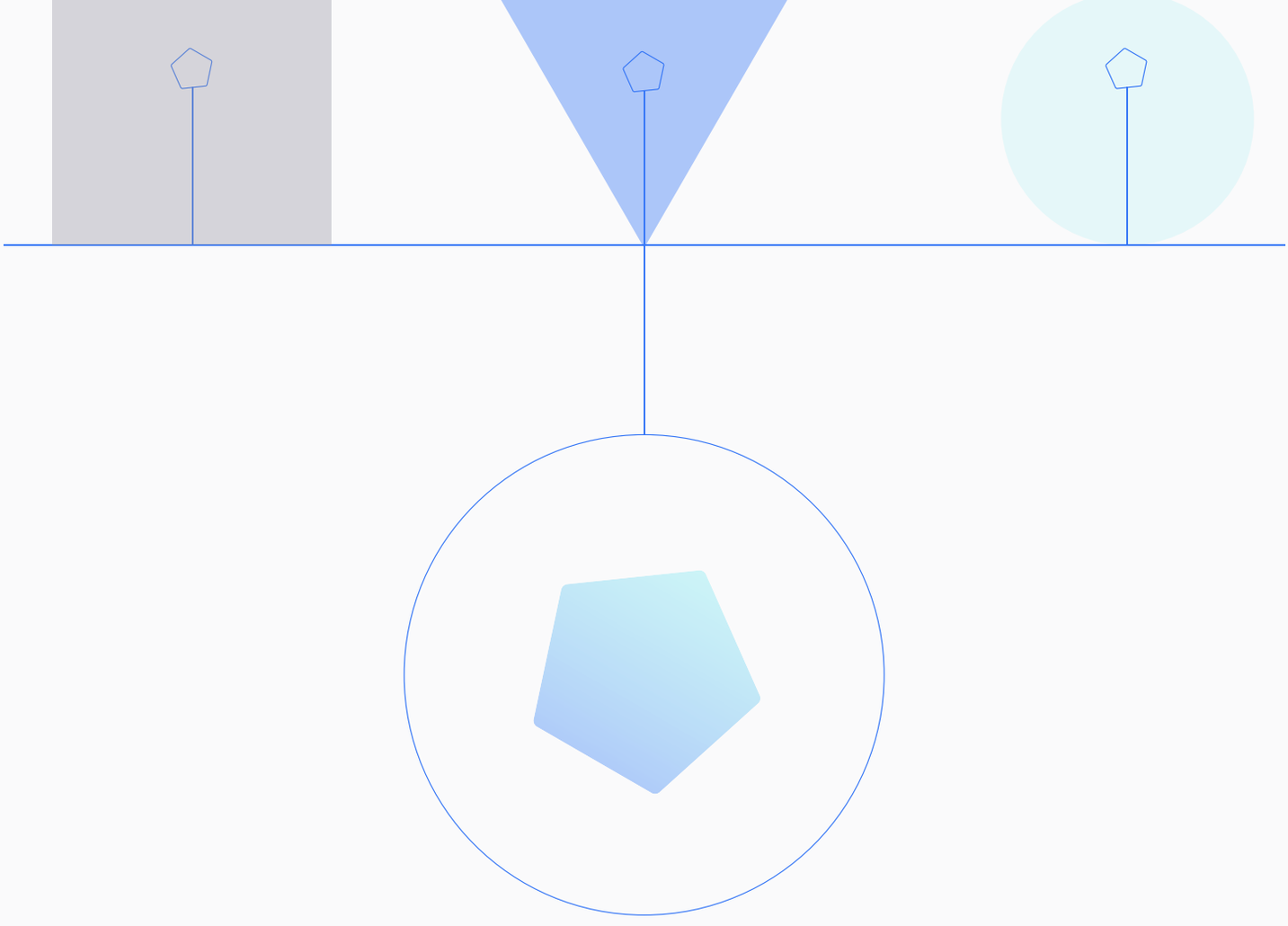
Resource optimisation

By freeing up time and resources previously devoted to manual tasks, companies can focus on higher- value activities such as strategic analysis and financial planning.

Financial data integration

Automated solutions can be integrated with other business management systems, providing a comprehensive view of the company's financial and operational situation.

In short, automated bank reconciliation is more than just an operational improvement for modern companies; it is a strategic necessity in today's complex financial environment. This ability to identify discrepancies in real time and seamless integration with other financial and accounting systems enables a comprehensive and up-to-date view of a company's financial health, essential for strategic decision making.



2

The automation in the reconciliation of payment and collection platforms

One of the areas that has undergone a significant transformation thanks to technological innovation is the reconciliation of collection and payment platforms, which include both digital and traditional Point of Sale Terminals (POS), among others.

However, the growing demand in areas such as e-commerce, cryptocurrencies or digital payments have caused the volume of transactions to grow to limits never seen before, increasing the complexity of the process and making the bank reconciliation process more difficult.

Fortunately, digitisation has **improved the outlook and the way in which companies conduct their accounting processes.** Automating this process not only represents an advancement in the way companies handle their financial transactions, but also offers a tangible positive impact on their overall operation.

What is the reconciliation of collection and payment platforms?

The reconciliation of collection and payments is the process of verifying that transactions made through different collection channels, such as digital platforms or POS, are correctly and consistently recorded in a company's accounting books.

It is a s**ystem analogous to bank reconciliation**, with the difference that, instead of involving only the accounting systems registered in an ERP with respect to bank accounts, payment platforms such as Paypal, Stripe, Ayden, 2checkout and traditional POS such as Redsys are taken into account.

Although sometimes overlooked, this process is critical to **ensure the accuracy of financial records** and to identify and correct any discrepancies that may affect the financial health of the organisation. And, in fact, for many companies, especially those in the e-commerce business, it is a necessity, rather than a mere value-add.

Payment reconciliation challenges

Today, cash flow generated through payment platforms faces multiple challenges that can affect operational efficiency, accuracy of accounting records and ultimately, the financial health of organisations.

Some of the principal challenges associated with this practice are:

Transaction volume and diversity

With the exponential growth in e-commerce and the adoption of multiple payment platforms, companies are handling a significantly higher volume of transactions.

The diversity of these platforms (credit cards, bank transfers, electronic payment systems, crypto currencies, among others) **further complicates the reconciliation**, as each has its own data formats, processing times and associated fees.

Payment processing delays

The times to process can vary significantly between the different payment platforms

These delays in crediting or deducting funds can complicate the reconciliation process, especially when attempting to close the books in a specific fiscal period.

The lack of real-time synchronisation can result in timing discrepancies that require subsequent adjustments.

Systems integration challenges

Companies often use multiple systems to manage different aspects of their operation, from customer relationship management (CRM) to enterprise resources planning systems (ERP) and payment platforms

The lack of effective integration between these systems can hinder the reconciliation process, creating information silos that make it difficult to have complete visibility of financial transactions.

Automation as a solution

Despite the growing complexity in the current business environment, automation in reconciliation of payment transactions is presented as an innovative solution that eliminates the need to perform these error-prone and time-consuming processes manually.

The implementation of automated systems allows companies to process huge volumes of transactions in an efficient manner, significantly reducing the risk of human errors and optimising staff time to concentrate on higher value-added tasks.

Discover more about Embat

How to automate the reconciliation of payments with cards and other payment platforms?

By now, we all recognise the importance of the bank reconciliation process and the need for its automation. The implementation of generative artificial intelligence in Embat's accounting and bank reconciliation functionality has simplified this process. However, the integration of other payment platforms, such as PayPal or credit cards, presents additional challenges.

Luckily, although it is a complex solution to implement, **it is actually more than possible.** There are ways to automate this reconciliation with other external systems beyond the banks. Below, we review some of the key steps to achieve this.

Integration of systems

The initial step is to integrate the company's financial management system, treasury management system or ERP (enterprise resource planning) with both banks and payment platforms.

On the one hand, **because it is necessary to obtain the initial payment data from these payment platforms** and, on the other hand, because it is also important that, once this information is in the bank records, it is essential to receive it with the electronic bank statement.

Although there are different ways to make this functionality a reality, this integration can be achieved through banking APIs (Application Programming Interfaces), which enable the secure and efficient exchange of financial data in real time.

Discrepancy review and resolution

Although, as we have seen, modern bank reconciliation systems **automate this process as much as possible**, a manual review process is necessary to detect and correct any discrepancies detected.

Companies can establish procedures to investigate and resolve these differences, which may include correcting errors in accounting records or communication with the bank or payment platform to clarify discrepancies.

Follow-up and control of reconciled records

The tools of banking reconciliation automatically **generate detailed reports that facilitate the follow-up and auditing of reconciled transactions.** For example, they make it possible to see, for a given account or company, how many transactions remain to be reconciled and whether there are records that allow such reconciliation.

These reports are essential for financial analysis, decision making and compliance with regulatory requirements.

Banking reconciliation tools

Generally, payments with credit cards and with other payment methods involve a high volume of transactions, especially when compared to other accounting records. Therefore, it is important to have automatic reconciliation tools in order not to lose any records and to avoid human intervention.

The most advanced tools allow, through the use of AI and other analogous technologies, **to compare the accounting records with the records of the payment platforms and reconcile those that match automatically.** In most cases, the volume of transactions to be reconciled will be reduced to the minimum necessary.

Continuous improvement

The automation of banking reconciliation is not a static process. It is a model that requires a cycle of continuous improvement, which regularly evaluates the effectiveness of the reconciliation process and adjusts the rules and procedures according to the reality and needs of each company.

In fact, given the volume of transactions and the complexity of the process, the implementation of a bank reconciliation process usually requires such an evolution.

Ultimately, the reconciliation of different payment platforms is an essential process to ensure the accuracy and integrity of a company's financial information.

By automating these tasks, organisations can significantly improve their operating efficiency, reduce the risk of human errors and discrepancies in transactions, and free up valuable resources that can be directed to more strategic activities.

In addition, **the automation of bank reconciliation provides real-time** visibility of the company's financial position, especially in such a high-volume process, which is crucial for effective cash flow management and informed decision making.

3

Integrated accounting: overcoming barriers in payment and collection platforms

For medium to large companies, the capacity to integrate a range of payment and collection platforms in a single treasury management solution represents a significant advance, especially if, at the same time, it's possible to incorporate the entire accounting side into their systems.

But, how do you overcome the current barriers in your payment and collection platforms? What are the challenges? Here's how technology has changed the current treasury paradigm, making integrated accounting a reality.

Current challenges with payment and collection platforms

There are an overwhelming number of payment and collection platforms available on the market today: Paypal, Stripe, AMEX, Alipay....

Each has its own set of features, interfaces and requirements, making their use and, above all, their integration with a company's accounting platforms very complex.

This fragmentation not only complication the management of corporate finances, but also increases the risk of errors in the reconciliation of accounts and in the accounting of everything to do with treasury, which can lead to significant discrepancies in financial records.

In addition, it should be understood that all this variety of payment options can be a double-edged sword. While this diversity offers customers the flexibility to choose their preferred payment method, it can also lead to confusion and an inconsistent user experience.

Businesses should strive to offer a seamless and consistent payment experience across all platforms, which is a challenge given the variety of payment interfaces and procedures.

Finally, it should not be forgotten that the use of multiple payment and collection platforms **increases risk and security breaches.**

Each platform may have its own security standards and practices, which can create inconsistencies in the level of protection of customers' financial and personal data. In addition, ensuring compliance with financial and data privacy regulations across multiple systems can be complicated and require constant monitoring.

The necessity of integration

In view of the aforementioned challenges, **there is a need for innovative solutions** that can simplify and optimise the management of financial operations in companies, especially in everything related to the accounting of receipts and payments.

These technological solutions aim to provide a comprehensive response to integration, security, compliance and operational efficiency issues, thus leading the way towards greater harmonisation and automation of financial processes.

Some of the most modern and sophisticated treasury platforms, such as Embat, represent an important step forward in integrated finance, particularly in view of the different characteristics of the means of payment. These solutions make it possible among other things, to integrate and centralise a complex web of different payment and collection systems and services on a single platform.

Benefits of integrating receivables and payments platforms

There is no doubt that the integration of accounting in a single software only brings benefits to the company. Some of these benefits are as follows:

Improved operational efficiency

The integration of payment and collection systems under a single **treasury management platform** eliminates the need to operate and maintain multiple systems simultaneously.

This not only reduces the operating costs associated with the maintenance of various systems, but also minimises the training required for company staff. Efficiency is increased by reducing the time spent on manual data entry, an error-prone and time consuming task.

By automating collection and payment processes, businesses can process transactions faster, improving cash flow and customer satisfaction.

Automation of accounting reconciliation

Account reconciliation, a process that is often time-consuming and error-prone, becomes much easier with an integrated system where all platforms are available. This is especially relevant for bank reconciliation, a process that is essential for detecting discrepancies and correcting errors.

By automating reconciliation, companies can ensure that all entries are recorded correctly and consistently across all platforms. This not only saves time but also significantly reduces the potential for human error, which in turn minimises the risk of fraud and improves the integrity of financial reporting.

Precision and improved control

An integrated accounting system, where all collection and payment transactions are joint, provides a single source of truth for all financial transactions. This improves accuracy by eliminating discrepancies between data from different systems.

With a consolidated view of finances, managers have better control over the company's resources enabling them to make more informed decisions. In fact at a glance they can get a consolidated view of cash flow.

In addition, the ability to monitor transactions and cash flow in real time facilitates early detection of potential problems, enabling rapid intervention to mitigate risks.

Discover more about Embat

Enhanced analysis and reporting

With all financial data centralised, companies can generate more complete and accurate reports with a much more consolidated view at group and bank-wide level. This includes everything from cash flow reports to profitability analyses and financial performance assessments.

The ability to access detailed, real-time reports enables business leaders and finance teams to perform deeper, more strategic analysis, identifying trends, cost optimisation opportunities and areas for improvement.

Compliance and security

Collections and payments require additional and enhanced security in order to avoid breaches that could put your systems at risk, as they are a critical aspect of any businesses, regardless of its size. In addition, systems must be continuously adapted to regulatory changes that may occur by country

The integration of accounting systems also plays a key role in regulatory compliance.

With a unified platform, ensuring adherence to local and international regulations becomes more manageable, as the solution can be updated to reflect changes in legislation.

Ultimately, **integrated accounting is the bridge to more efficient, transparent and secure** financial management, paving the way for a future where barriers between charging and payment platforms are a thing of the past

By overcoming the traditional barriers between different platforms and systems, this innovation enables a holistic, real-time view of an organisation's financial health.

4

Payment reconciliation: retail, e-commerce and tech innovations

As companies strive to keep up with the increasing volume and complexity of transactions in these fields, **technology is positioned as a valuable enabler.**

In this section, we will delve into how innovations are transforming payment reconciliation in the retail, e-commerce and technology sectors, addressing the unique challenges faced by each.

The main challenges in the reconciliation in the retail, e-commerce and technology sectors

In the fast-paced world of retail, e-commerce and technology, where innovation and competition are relentless, companies face constant and evolving challenges to keep their financial operations aligned and accurate. In these sectors, where transactions multiply at a frenetic pace and globalisation expands the boundaries of commerce, the challenges or reconciliation are magnified.

From managing huge volumes of data to the need to comply with complex and changing financial regulations in cross-border environments, **these industries face a significant maze of challenges.** However, each of them has certain specific aspects that are important to explore further. Let's take a look at some of the main challenges these industries face on a daily basis.

Retail Industry

In the retail industry, reconciliation of payments has traditionally been a manual process, prone to errors and time consuming. All of this must be considered while accounting for the high volume of transactions that take place on a daily basis.

Additionally, another significant challenge is the diversity of payment methods consumers use today, ranging from credit and debit cards to mobile payments and digital currencies.

Moreover, another major challenge lies in the wide variety of payment methods that consumers use today, including credit and debit cards, mobile payments, and digital currencies.

This variety introduces additional complexity in the reconciliation, as each method comes with its own set of fees, processing times, and fraud risks.

E-commerce

E-commerce **presents a unique set of challenges in payment reconciliation**, stemming from the management of multiple payment platforms, currencies, and internal regulations.

Added to this is the increasing complexity of cross-border transactions, which not only differ in terms of currency but also involve exchange rates and applicable banking fees, further complicating the reconciliation process.

Furthermore, **the online nature of e-commerce entails a high volume of returns** and refunds, each of which must be meticulously tracked and reconciled to ensure financial accuracy.

Finally, online payment security and fraud protection are ongoing concerns, requiring reconciliation systems to be not only accurate and efficient but also incredibly secure, incorporating advanced technologies to detect and prevent fraudulent activities in real time.

Tech

In the technology sector, payment reconciliation challenges are magnified by the rapid pace of innovation and the adoption of new technologies. **Managing payments across multiple digital platforms,** along with the continuous introduction of new electronic payment methods and cryptocurrencies, presents a significant challenge in terms of reconciliation.

These transactions not only vary in mechanisms and processes but also present different security and compliance challenges, especially in a regulatory environment that is constantly evolving to keep pace with new technologies.

Furthermore, similar to e-commerce the technology sector often operates on a global scale, which involves managing payments and reconciliations across multiple currencies and jurisdictions, each with its own regulations and tax requirements.

How to reconcile payments in these industries? The focus on technology.

These industries have something in common: **they are all strongly influenced by new technologies and can be said to be at the digital forefront compared to other sectors.** In fact, the use of emerging and, in some ways, revolutionary technologies is the norm.

In the payments sector and its integration with financial and accounting systems, technology is no longer just an added value, but a necessity. The volume of banking transactions in these industries is extremely high, which increases both complexity and risks.

Fortunately, **there are specific innovations designed to improve and address the efficiency** and financial issues associated with these challenges.

Discover more about Embat

Blockchain

Blockchain technology offers an innovative and transformative approach to accounting and banking reconciliation, providing solutions that promise greater transparency, security and efficiency.

On one hand, because this technology, by creating an immutable and chronological record of all transactions, provides a single source of information accessible to all involved parties, which simplifies information sharing. Furthermore, it is possible to trace the origin and destination of each transaction, enabling, through unique identifiers, improved transparency and the automation of the bank reconciliation process.

In addition, smart contracts, which are closely related to blockchain, enable the execution of certain contacts when specific conditions are met, thereby improving the reconciliation process for payments and transactions and accelerating this process.

Artificial Intelligence and Machine Learning

Artificial Intelligence promises to be present in all sectors of our daily lives. Companies that know how to use it intelligently will enhance their processes, particularly in treasury financial operations.

In the field of bank reconciliations, AI enables the reconciliation of banking transactions with the corresponding accounting entries, processing large volumes of data in real time and with high precision. Additionally, machine learning algorithms learn from patterns in historical transaction data, drawing from past reconciliations to enhance the accuracy and speed of future reconciliations.

But it doesn't stop there, as AI can also function as an advisor in treasury matters.

RPA

Robotic Process Automation (commonly known by its acronym RPA) has become a key tool for enhancing efficiency and accuracy in accounting and banking reconciliation. By mimicking human actions in the user interface of computer systems, software 'robots' can perform repetitive and tedious tasks, freeing up staff to focus on higher-value activities.

Specifically, RPA can extract information from invoices, receipts, bank statements, and other financial documents, and then input this data into the relevant systems for processing and reconciliation. It can also perform bank reconciliations in real time or at scheduled intervals, depending on the needs of each clients, ensuring that accounting records always align with bank balances.

Additionally, RPA technology allows for quick integration with existing accounting and banking systems, without the need for significant changes to the IT infrastructure. And the best of all, these software robots can be swiftly reconfigured to adapt to changes in processes, policies or regulations.

Bank APIs and Open Banking

Open banking has revolutionised the way financial information is accessed and shared, promoting greater innovation and competition in the banking sector. The revised Payment Services Directive (PSD2) in the EU has been the key catalyst for this change, requiring banks to open access to their data and services to authorised third parties through APIs

APIs provide real-time access to bank account data, enabling faster and more accurate accounting and bank reconciliation. Furthermore, by integrating accounting systems with banking data through APIs, companies can automate transaction reconciliation, enhancing operational efficiency and minimising human errors

Furthermore, the opening of banking infrastructure will only lead to greater financial innovations. This will represent a significant boost for companies' reconciliation process.

Treasury management platforms

All these technologies, on their own, are not enough. In fact, most users would be unable to derive practical applications for them. This is why we need advanced, **cloud-based treasury management platforms**, such as Embat, which integrate the latest innovations and technologies, offering a cutting-edge solution for technology, retail, and e-commerce companies.

This type of system offers a wide range of advanced functionalities designed to enhance the efficiency, accuracy and security of treasury management.

Its advantages are as follows:

- Treasury management solutions leverage AI algorithms to analyse trends and patterns in financial data, enabling accurate cash flow forecasting and effective risk management
- It ensures that all transactions and processes comply with current regulations, including PSD2, through secure integration with the banking ecosystem.
- It accesses banking information through APIs, retrieving the banking pool and details of various bank accounts directly from their statement records. All of this is done seamlessly and in real time
- It leverages RPA and other workflows to automate repetitive tasks, reducing errors and freeing up staff to focus on higher-value activities.
- It facilitates the execution of domestic and international payment batches directly from the platform, using bank APIs for seamless integration with banks and payment service providers
- It offers specific modules tailored to the unique needs of each company, enabling optimal customisation and scalability
- It ensures seamless integration with existing ERP and accounting systems, enabling a consistent and centralised flow of data. The communication between these software systems and the enterprise management system is continuous, facilitating the process of bank reconciliation.

Payment reconciliation in the retail, e-commerce, and technology sectors is undergoing a profound transformation thanks to technological advancements. Automated solutions based on artificial intelligence are not only simplifying previously complex processes but also creating new opportunities to improve operational efficiency and drive strategic innovation.

5

Conclusion

Automating the reconciliation of payment service providers is an effective way to address the operational and accounting challenges faced by companies. Finance teams achieve greater accuracy in their records, proactively identify discrepancies, and ensure efficient integration with existing accounting systems

Sectors such as retail, ecommerce and technology are already adopting these solutions to improve cash flow management, optimise resources, and ensure consistency in financial data.

This approach not only responds to current operational demands, but also strengthens an organisation's ability to adapt to a constantly evolving business environment.

Specialised tools — such as Embat's treasury management platform — further enhance these benefits by reducing the risk of errors, accelerating key processes, and providing accurate data to support more informed and strategic financial decision-making.

Autores:

Tomás Gil

Partner & CTO

Embat

Tomas studied Telecommunications Engineering at the University of Alcalá and began his career as an IT consultant at Santander Bank. He developed his career by spending four years at Fintonic where he became the CTO for Latin America. Toni and Carlos, co-founders of Embat, invited him to join the Embat project, where he became the third partner to revolutionise financial processes for mid-sized and large companies. Tomás brings with him many years of experience related to global banking connectivity.

Diego Lorenzana

Treasury Consultant

SAP

Diego holds a degree in Computer Engineering from the University of León and a degree in Business Administration from UNED. His career as an SAP consultant has taken place in leading international consulting firms, where he has specialized in treasury and finance. He has tackled complex challenges, particularly those related to banking connectivity and communication, and has shared his deep knowledge through journalistic publications and articles in industry companies like Embat. Outside of work, he is passionate about sports and music, which are two of his favorite hobbies.

About Embat:

Embat is a comprehensive cloud-based treasury solution that enables finance teams in medium and large companies to centralise all operations across their banking relationships and financial management processes in real time. It helps teams save up to 75% of the time spent on manual tasks, freeing them to focus on strategic decision-making.

Want to learn more? Contact us: https://www.embat.io/en/book-a-demo

From PayPal to Stripe:

Automated reconciliation and accounting for collection and payment platforms

Embat