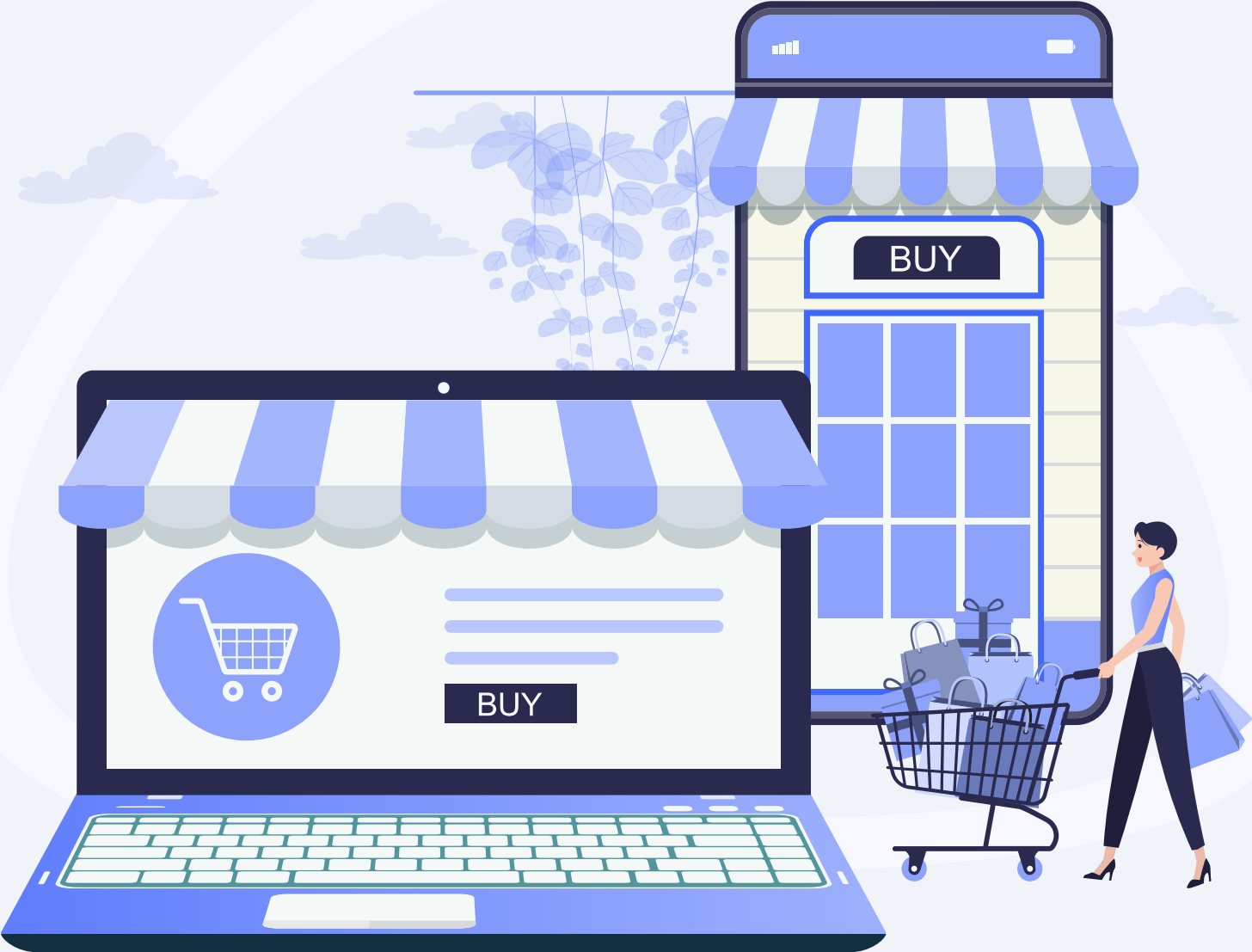# How to Integrate a Payment Gateway: A Short Guide

Most businesses that sell goods or services online should integrate a payment gateway to make the purchasing process easier for the customers. This software solution enables the transfer of money from the customer's account to the seller's account within a few seconds.
In this blog post, we will see how do payment gateways work and how to choose the one that better suits your business.

How Does Payment Gateway Work

Being a mediator between the customer and the merchant, a payment gateway covers a wide range of financial operations: from money authorization (to ensure the seller has the requested sum to pay for the purchase) to the refunding in case of a canceled order.
Below is a scheme on how it works.
The customer confirms the order and payment details are sent to the app's server and then — through the payment gateway — to the payment processor, card's network, and to the issuing bank. Upon request, the bank approves (or not) the transaction and sends back the confirmation within the same chain of participants.
The scheme might seem complicated however the whole process takes just a few seconds.

Security Issues

As payment gateways transfer the user sensitive transaction information, they have to guarantee the security of such data as CVV code, card number, card holder's name, etc. That is why each payment gateway has to keep PCI DSS compliance which implies strong data protection, regular testing, encryption, access control elements implementation, and all the other things that might be required for enhancing security.

The Types of Payment Gateways

There are several types of payment gateways to choose from depending on the business size and needs. Let us now highlight their pros and cons as well as the difficulty of the integration process in order to simplify your choice.

Hosted

The hosted payment gateway redirects the customers from your app to its platform to make the payment and takes them back when the payment is complete. Among the most famous of them are PayPal, Amazon Pay, SagePay, etc.
One of the key advantages of such a solution is a simple payment gateway integration process: for the apps using popular e-commerce platforms (like Magento or Shopify), it might be enough just to install an extension. In case of having a custom web or mobile application, you might want to hire software developers for help but most of the service providers have detailed guidelines explaining how to integrate their payment gateway. One more significant advantage is that all the security issues are managed by the service provider, too.
What about the disadvantages? Firstly, the redirection of customers to third-party services spoils user experience and decreases conversion. Secondly, in the case of changing the partner, you might lose your client database since service providers keep all the data.
This type is preferable for small and mid-sized businesses.

Integrated

With an integrated payment gateway, the customers stay at your app and the payment is completed without the redirection elsewhere. This type of payment solutions is provided by Authorize.net, MangoPay, SagePay Direct, etc.
Its advantage over a hosted gateway is a smoother user experience and more control over the data. Along with these pros come cons: you have to take care of fraud protection and users' data security (PCI DSS compliance) as well as to spend more effort on the payment gateway integration process. While some apps can use APIs to integrate a non-hosted payment gateway easily, those running with a custom engine will require technical skills or the help from the software development team. Integrated payment gateways will be a good choice for medium and large companies.

Custom

This type of payment gateway enhances features of the previous one providing the best possible level of control over the payments while requiring deep technical expertise. Using your own custom payment gateway, you do not need to rely on third-party services and to share any data with them. Moreover, it allows adding any modifications and changes you might need.
The list of disadvantages of such a type includes price (a software development team will be needed), time (the development, testing, and integration will take a while), and security-related challenges (meeting PCI requirements and handling documentation issues). The custom payment gateway is an option to choose for large companies and enterprises.

Bottom Line

Having almost 20 years of experience in software development, SCAND offers the team of professionals skilled at simple payment gateway integration. Regardless of what application do you have — web, mobile, or both of them — our engineers can help you with the integration of the most suitable payment gateway as well as develop a custom solution focused on your business goals. Feel free to ask any questions and delegate to us the payment gateway integration process.

Feel free to contact us and ask any questions: info@scand.com