

# Digital invoicing in B2C and B2B

Find out how you can future-proof your company's invoicing.



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## Introduction

What is particularly important to our customers? Solutions that are future-proof and make their processes efficient. Our aspiration as a leading Swiss financial institution is to support you with solutions that do precisely that. This of course also applies to invoicing as an essential pillar of Swiss payment transactions. Not only has acceptance of mobile payment transactions grown in recent years, electronic outpayment orders have also increased. The trend is clear: customers increasingly want to experience invoicing and receipt of their invoices digitally.

Good for you: when it comes to invoicing, the digital transformation also has numerous advantages for companies. By digitizing and automating processes, you can save valuable time and reduce your costs. This approach also goes easy on the environment and company resources, and you benefit from an increased level of reliability and technological security.

In this whitepaper, we will show you the possibilities of digital invoicing in the B2C and B2B sectors, how you can position yourself ideally for the future in this regard and how you can win over more customers to electronic invoices. On the one hand, you offer your target group the best possible user experience, while on the other securing a whole range of ground-breaking advantages for you and your company.

We hope you find it an illuminating read!

### The advantages of electronic invoicing



### You reduce costs

By digitizing processes and automating repetitive tasks, you reduce your workload. Invoice recipients don't have to deal with manual entry in their accounting system, and there are no costs for printing, mailing or paper for invoice issuers.



### You improve security

In terms of the date on which payments are initiated and made, digital invoices have proven to be significantly more reliable. They also allow for greater security and control of user data.



### You save time

Digital data is processed immediately – in contrast to data that first has to be entered manually (e.g. from letters or e-mails). This streamlines your processes and reduces the potential for error.



### You protect the environment

Digital invoices do not need paper, ink or delivery by post. This saves on resources and reduces  ${\rm CO_2}$  emissions.

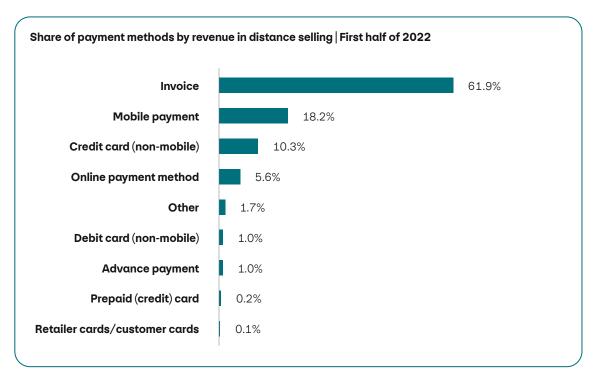


### What are electronic invoices?

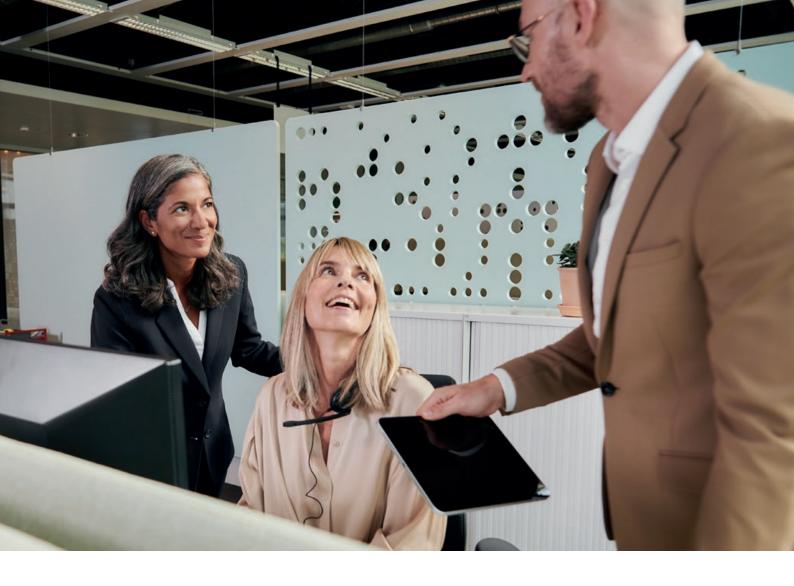
# The relevance of invoices as a means of payment in Switzerland

According to the Swiss Payment Monitor 2/2022, published by the University of St. Gallen/Zurich University of Applied Sciences, mobile payment has accounted for a higher number of transactions in distance selling since 2020 – nonetheless, the invoice share of payment methods has remained relatively stable. In the first half of 2022, mobile payment actually saw a slight decline in transactions

(from 20.4% in the second half of 2021 to 18.2% in the first half of 2022), while the use of invoices rose sharply (from 46.9% in the second half of 2021 to 61.9% in the first half of 2022). For the second half of 2022, however, invoice transactions are expected to settle back to 2021 levels. Nevertheless, this confirms that the great relevance of invoicing in Switzerland remains unchanged.



Source: Graf, S., Heim, N., Stadelmann, M. and Trütsch, T. (2022): Swiss Payment Monitor 2022 – How does Switzerland pay?, Issue 2/2022 – Survey May 2022, Zurich University of Applied Sciences/University of St. Gallen.



# What types of digital invoices are there?

Paper invoices are becoming less and less important. Among the reasons for this are that the requirement for a digital signature has been eliminated and that electronic invoices and (scanned) paper invoices have been accorded the same status since January 2018. In 2019, 77% of payments were initiated electronically, while the volume of paper invoices fell by 36% between 2012 and 2019 (analysis by SIX, European Consumer Payment Report 2019).

We would now like to introduce you to three types of electronic invoice and their various forms: the e-mail invoice, the structured invoice and eBill.

#### The definition of an electronic invoice

An electronic invoice is an electronic document that is delivered electronically and has the same content and legal consequences as a paper invoice. The file format and type of data transfer can vary.

### E-mail invoice

The e-mail invoice is basically an invoice in PDF format. The PDF format has three possible forms: the PDF invoice, the QR-bill and the hybrid invoice. These differ in terms of the type of payment details or degree of machine readability.

### **PDF** invoice

The PDF invoice is an unstructured digital invoice that, while it contains an IBAN, also requires a separate payment process: the payment information has to be either transferred to mobile or e-banking, sent to the bank as a payment order by letter or paid over the counter.

Document format:	PDF
Type of payment details:	IBAN
Level of data digitization:	Not available
Delivery channel:	E-mail



#### QR-bill

After a transition period of around two years, the QR-bill replaced the inpayment slip (ISR) in September 2022. Recipients can pay invoices either by scanning the QR code or, as is the case with the PDF invoice, via mobile/e-banking, letter to the bank or directly over the counter. QR-bills do not have to be issued electronically, they can also be sent to invoice recipients by post.

Document format:	PDF
Type of payment details:	QR code
Level of data digitization:	Low
Delivery channel:	E-mail



### Hybrid invoice

The hybrid invoice consists of both an image file (e.g. PDF) and a data file (e.g. XML). Unlike a structured invoice, the latter focuses on a small amount of key data. For companies with the right software, it is possible to read the structured data automatically. However, this also means that invoice recipients who prefer to process structured data will always need to archive the image file as well.

Document format:	PDF and XML (or similar structured data)
Type of payment details:	IBAN and fully structured data
Level of data digitization:	Medium
Delivery channel:	E-mail and channels for structured data



### Structured invoice

Digitizing document processing can reduce costs and optimize processes. A structured data set makes automated and seamless processing and interoperability of invoices possible. The company issuing the invoice sends structured invoices via a provider to the software used by the company receiving the invoice. Because the provider converts the format issued by the sender into the recipient's format, the data can be processed automatically. As a rule, the invoice recipient also receives a PDF file, which contains the invoice details and can be checked by staff.

Document format:	XML (or similar structured data)
Type of payment details:	Fully structured
Level of data digitization:	High
Delivery channel:	Channels for structured data



### eBill

With eBill, customers do not receive their invoices by post or e-mail, but rather directly in their mobile or e-banking account. To make this possible, customers register on the eBill platform with their home address and e-mail address. After completing registration, customers can then either request payment via eBill from the invoice issuers of their choice or register for all invoice issuers at the same time. When an invoice is issued, the person receiving the invoice receives a push notification, and they then approve the eBill invoice or set up permanent approval. For the Swiss financial center, eBill is a success story: while there were just 1.25 million Swiss users of eBill at the end of 2019, the number had doubled to 2.5 million by the beginning of 2022, which means that eBill reaches almost half of all Swiss households.

Document format:	PDF
Type of payment details:	Fully structured
Level of data digitization:	High
Delivery channel:	Mobile/e-banking



### **Useful to know:**

PostFinance offers structured invoices for companies under the product name "e-invoicing". Find out more



# Utility analysis of invoicing methods

The various methods of digital invoicing presented in the preceding section have different advantages and disadvantages. On the basis of a utility analysis carried out by Swiss financial service provider SIX and Lucerne University of Applied Sciences and Arts (Future of Billing – A SIX White Paper, 2020), the various methods are grouped under different aspects below and rated using various indicators. One star is the lowest rating, five stars the best possible rating. In particular, we examine the utility value for invoice issuers.

The political-environmental aspect considers the integration potential and future viability of an invoicing method. In the economic aspect, the emphasis is on costs and efficiency. The focus of the social aspect

is on the practicality of the method: how user-friendly is a method for invoice issuers and recipients? Lastly, the technological aspect considers the security and resilience of the method.

Aspects	Political- environmental	Economic	Social	Technological
Indicators	Harmonized method	Costs per invoice	Coverage of use cases	Security
	Transparency	Efficiency	Reliability	Susceptibility to error
	Sustainability	Cash management	Convenience	

### PDF invoice

As a digital version of a postal invoice, the PDF invoice constitutes a mechanism that is now outdated. The aim of the international standard ISO 20022 is to harmonize procedures in the financial sector with a view to enabling standardized procedures and non-sector-specific invoices for national and international cooperation. While the PDF invoice with the IBAN does include a harmonized element, it and other invoice information (such as amount, due date, etc.) cannot be processed automatically when the invoice is received, and it is therefore increasingly being replaced by structured data traffic.

The information content of a PDF invoice is structured clearly and comprehensibly, but it does not allow for reliable progress tracking. In terms of receipt and payment, the payment recipient's handling of the invoice may also be impossible to plan precisely.

An advantage of this method is that invoicing can be fully automated and that paper documents are obsolete. Nevertheless, PDF invoices cannot be seen as a very lasting solution: the digital infrastructure is standardizing more in the direction of structured data, and future viability is therefore proving to be limited.

For invoice issuers, the e-mail invoice, together with the QR-bill, is the most expensive of the digital methods. This method may involve high reminder fees as well as fees for cash payments at the post office counter and rejection fees. For invoice issuers, the efficiency of a method depends not only on the effort required for creation, but also on the potential for delays in payment on the part of the invoice recipient. The more manual steps a customer journey involves, the more likely it is that payment will be delayed. With a PDF invoice, the invoice recipient always has to transfer the information manually. E-mails may also end up in the recipient's spam folder, may be overlooked or may be deleted accidentally.

Planning certainty is essential for a company's cash management and the company's use of working capital. Because of the manual data transfer required by the invoice recipient, the degree of uncertainty regarding the payment date is relatively high.

The most suitable invoicing method is also a question of the billing relationship between the invoice issuer and recipient. If a large number of invoices are created each year, an automated method is suitable. If the number is small, the PDF invoice can be advantageous and save on costs.

Contact by e-mail creates a touchpoint that can be used to nurture the customer relationship – this is a clear advantage. The costs of converting to other methods of invoicing are also saved.

In terms of security, there are no concrete structures and rules in place for the PDF invoice – and sending mail also creates a strong risk of data protection breaches, for example through phishing attacks. Susceptibility to human error is another factor contributing to the low security of the PDF invoice.

Aspects	Indicators	Rating
Political-environmental	Harmonized method	**
	Transparency	***
	Sustainability	***
Economic	Costs per invoice	***
	Efficiency	**
	Cash management	***
Social	Coverage of use cases	***
	Reliability	**
	Convenience	****
Technological	Security	**
	Susceptibility to error	**
Overall rating		2.7 stars

### QR-bill

As previously mentioned in the section on PDF invoices, there have been efforts to harmonize Swiss payment transactions with international standards for payment transactions (ISO 20022). The final step towards standardization took place in June 2020 with the introduction of the QR-bill. Because it meets the new standards, it is completely future-proof.

With regard to transparency, however, the QR-bill has the same problem as the PDF invoice: it does not allow for reliable progress tracking and receipt and payment of the invoice are very difficult to calculate precisely.

Making invoicing methods future-proof also means acting sustainably. The QR-bill is sustainable in that companies can operate in the long term on the basis of uniform standards. As to whether the QR-bill also saves on resources, that depends on whether it is paper-based or sent to the invoice recipient digitally.

If we look at the costs per invoice, the QR-bill — both paper-based and as an e-mail invoice — is less expensive than a PDF invoice with an IBAN. While the amount of resources used would be the same, the error rate on the part of the invoice recipient is lower because with the QR-bill, the data does not have to be processed manually after scanning. It should however be noted that the QR-bill may also incur potential fees for cash payments at the counter as well as rejection fees and high reminder costs.

QR-bills do not require registration, making them a fast and straightforward invoicing method. They are also reliable, as they involve a high degree of automation.

In terms of use case coverage, the QR-bill performs well: it is a practical solution for one-off payments, for small or large numbers of invoice recipients, and is suitable for use with B2C and B2B transactions.

The QR-bill is proving to be more reliable than the PDF invoice, as it does away with manual data entry on the part of the invoice recipient, and hence with a major source of error. Nevertheless, this invoicing method also carries a higher risk of late payments – and tracking the receipt of invoices isn't easy either.

As is the case with the PDF invoice, the QR-bill also has the advantage of being a customer touchpoint. Companies can use e-mail invoices as an additional communication channel to interact with their customers. However, the convenience of the QR-bill must be rated as slightly lower, as the technical conversion to QR billing requires initial investments in time and money.

Invoicing standards such as the QR-bill are more susceptible to fraudulent activity than platforms such as eBill. However, the likelihood of phishing attacks is lower than for PDF invoices.

Because the data is transferred by scanning, the QR-bill is not very susceptible to human error. As with the PDF invoice, however, the likelihood of crossover errors is high.

Aspects	Indicators	Rating
Political-environmental	Harmonized method	****
	Transparency	***
	Sustainability	***
Economic	Costs per invoice	***
	Efficiency	***
	Cash management	***
Social	Coverage of use cases	****
	Reliability	***
	Convenience	***
Technological	Security	***
	Susceptibility to error	***
Overall rating		3.8 stars

### Hybrid invoice

The hybrid invoice is used in the B2B sector. Its integrated structured data records can be processed automatically by the invoice recipient's accounting software – provided that the recipient has such software. This makes this method even easier than a QR code, which first has to be scanned. However, if the invoice recipient does not have accounting software, the hybrid invoice is tantamount to a PDF invoice and involves the same amount of manual effort.

Aspects	Indicators	Rating
Political-environmental	Harmonized method	****
	Transparency	***
	Sustainability	***
Economic	Costs per invoice	***
	Efficiency	***
	Cash management	***
Social	Coverage of use cases	***
	Reliability	***
	Convenience	***
Technological	Security	***
	Susceptibility to error	***
Overall rating		3.6 stars

### Structured invoice

Frequently used in the B2B sector, the structured invoice in XML format (the term used at PostFinance is e-invoice) offers companies numerous advantages with respect to all four rating criteria. Its structured data makes standardized and automated processes possible for both the invoice issuer and the invoice recipient. This means that from the political-environmental perspective, this method of invoicing can be said to be sustainable: the structured data is based on a harmonized procedure that saves on resources and wins in terms of sustainability. While the structured data may not be meant for the human eye, the invoice recipient does usually also receive confirmation on receipt of the invoice in the form of a PDF document.

For companies that do not yet work with structured invoices, the changeover is a factor that costs time and money to begin with. In the medium and long term, they will however streamline their processes and reduce the costs and effort involved. Having said that, invoice recipients may generate additional work if they do not have software capable of processing structured data records, in which case invoice issuers will be forced to fall back on hybrid or PDF invoices. Nevertheless, trends in Switzerland show that more and more companies are relying on structured data and automated processes in order to position themselves for the future.

Because there is no risk of phishing attacks and the structured data can only be read by the software, this is an extremely secure method of invoicing. In addition to reducing costs, automation also significantly reduces any susceptibility to error.

Aspects	Indicators	Rating
Political-environmental	Harmonized method	****
	Transparency	***
	Sustainability	****
Economic	Costs per invoice	****
	Efficiency	****
	Cash management	***
Social	Coverage of use cases	***
	Reliability	****
	Convenience	***
Technological	Security	****
	Susceptibility to error	***
Overall rating		4.5 stars

### eBill

eBill is fully harmonized with the new standards in place in the financial sector and offers invoice issuers and recipients a high level of transparency: it allows invoice issuers to track the progress of the payment process and predict the expected date of payment, improving their ability to plan the availability of capital. With its high level of digitization and automation, and the manual work that is no longer required, this is an efficient process that saves on resources.

While the average cost of a paper invoice is CHF 4.53, the cost of an eBill invoice is just CHF 1.90 (Gashnjani & Klinkert, 2019). This is because there are no material costs, no fees for cash payments at the counter and no rejection fees to be paid. Reminder costs are also low because there are fewer payment delays compared to other invoicing methods.

In the following use cases in the B2C sector, eBill proves to be advantageous for invoice issuers: for both fixed and flexible invoice amounts, for recurring and multiple payments, and for high numbers of invoice recipients. Companies can also use this invoicing method as a customer touchpoint with a positive impact on customer retention. In some cases, companies that have not yet integrated eBill will first have to cover the costs of conversion, although there are numerous software providers who offer the necessary interfaces as standard.

From a technology perspective, eBill as a platform system offers a high level of security because there are only a few areas of information transfer that could be exposed to a security risk. In addition, participating parties must first register and invoice recipients' data must be validated by their banks. The level of susceptibility to error is also extremely low, in terms of both human error and transfer errors.

Aspects	Indicators	Rating
Political-environmental	Harmonized method	****
	Transparency	****
	Sustainability	****
Economic	Costs per invoice	***
	Efficiency	****
	Cash management	***
Social	Coverage of use cases	****
	Reliability	***
	Convenience	***
Technological	Security	****
	Susceptibility to error	****
Overall rating		4.6 stars

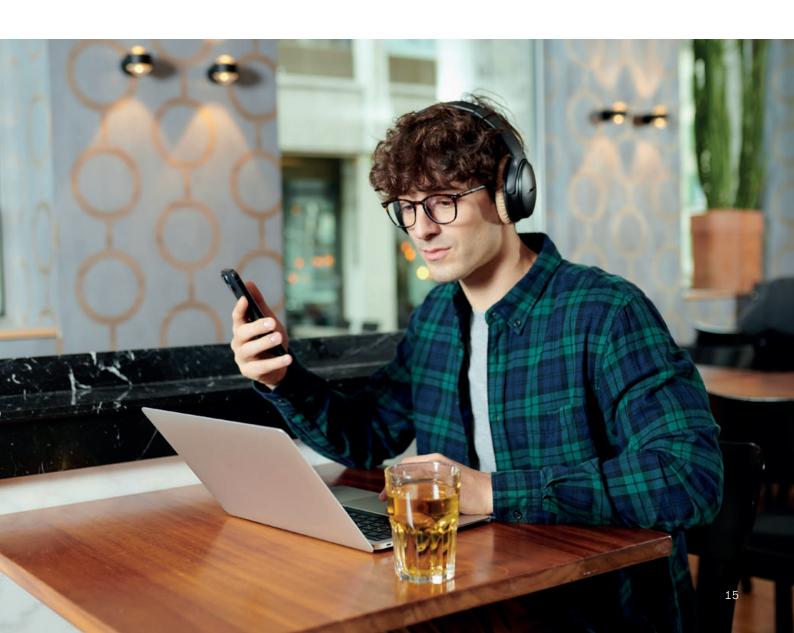
### Conclusion

The more automated processes are, and the greater their compliance with international standards, the more future-proof an invoicing method will be. While switching to these methods may initially involve outlays of time and money, you will save on resources in the medium and long term.

In the B2B sector, the structured invoice proves to be the best solution. Because the movement of data is between the accounting software on either side, this method is particularly sustainable, efficient, reliable and secure.

The situation with regard to the eBill solution in B2C is similar: the platform structure and the transparency, efficiency and security that come with it offer invoice issuers many advantages. This method also receives top marks for invoice recipients in all four aspects used for rating in the analysis conducted by SIX and Lucerne University of Applied Sciences and Arts (Future of Billing, 2020), so users at both ends of the payment process benefit from the eBill platform.

When choosing the right invoicing method, it is of course always important to look first at the requirements and needs of the company in question. Depending on the starting point, the methods may have advantages and disadvantages that are not applicable to other companies and could not be taken into account in the criteria used for rating set out above. What can certainly be said, however, is that digitization, automated processes and structured data will continue to grow in relevance and have a decisive impact on the future of invoicing.



### What measures can invoice issuers take?

The goals of this whitepaper are not only to show you the advantages of digital invoicing, but also to help you win your customers over to the methods – in both the B2B and B2C sectors. Our focus is on the structured invoice (B2B) and eBill invoice (B2C) methods, as these offer the most decisive advantages for invoice issuers and recipients (see preceding section).

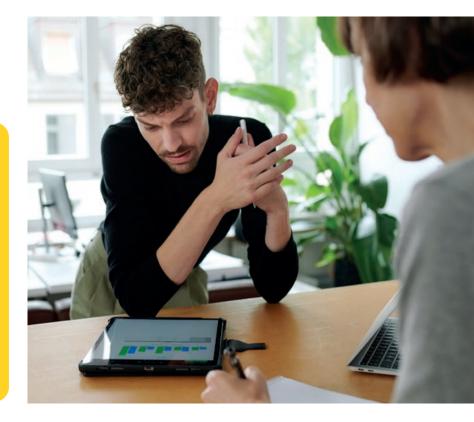
In what follows, you will find examples of best practice that can help you to convince your customers of the benefits of the structured invoice and eBill.

### E-invoicing at PostFinance

At PostFinance, the structured invoice is called e-invoice. With the e-invoicing solution from PostFinance, customers benefit from a large network, many years of experience and continuous product development. From simple online entry to fully integrated software solutions, there are various methods of invoicing at your disposal.

### eBill at PostFinance

With eBill, you can make use of a platform for your payment processes that offers both you and your customers an increased level of efficiency, reliability and security. Find out from PostFinance how you can use and integrate eBill to benefit your company.



### Best practice 1: Communicate via your own channels



Raise awareness of eBill and the structured invoice among your customers. Whether it's invoices, newsletters, social media or blog posts: our experience shows us that in-house communication channels are ideally suited to winning customers over.

Additional measures of particular interest for eBill: launch a cashback campaign that rewards your customers for using eBill. Tell your customer support to advise your customers to use eBill. And think about applying charges for paper invoices by collecting a processing fee for sending them.

At the bottom of this page, you will find marketing materials such as text modules, visuals, teasers, etc. that you can download and use as you wish on your channels.

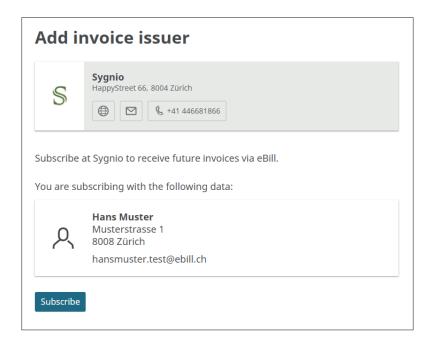
### Best practice 2: Find new recipients for eBill and structured invoices

To promote the electronic exchange of invoices between companies and organisations, PostFinance operates eDirectory – and supports an initiative of the Swiss Digital Invoice Forum (swissDIGIN). eDirectory is the directory for B2B invoicing in Switzerland. It allows you to identify business partners domiciled in Switzerland who wish to send and/or receive invoices with structured data.



And for eBill, there is "Look-up", which allows you to find new invoice recipients who wish to receive eBill invoices. As an eBill invoice issuer, you can check your customers' e-mail addresses or company ID numbers (UIDs) to determine whether you can send them invoices via eBill. More than half a million eBill users have already activated the "Add invoice issuers automatically" option. You can either integrate the look-up function into your software for automated queries using a web service, or you can manually request your customers' e-mail addresses individually via the elnvoicing provider.

### Best practice 3: Keep the registration form as simple as possible (for eBill only)



If customers have decided to add your company as an invoice issuer, then the registration process must be as straightforward as possible. This is where the login screen plays a key role. Be sure to keep the screen as simple as possible so your customers don't abandon the registration process. Remember that customers rarely have information such as a customer number — especially if they come to learn about eBill through marketing campaigns and if they don't have an invoice from you.

Useful to know: To simplify the registration option "Registration via invoice issuer search" in e-banking for eBill invoice recipients, SIX has harmonized the forms.

### Best practice 4: Integrate registration on your own channels (eBill only)



Companies can integrate eBill directly into their sales processes, and in doing so encourage eBill usage themselves, e.g. in their own customer portal or during their online shop's checkout process. By integrating eBill registration into your portals, you save your customers any media disruptions. Additionally, you also reduce the number of times your customers are redirected seeing as they don't have to be redirected to an external eBill registration site.

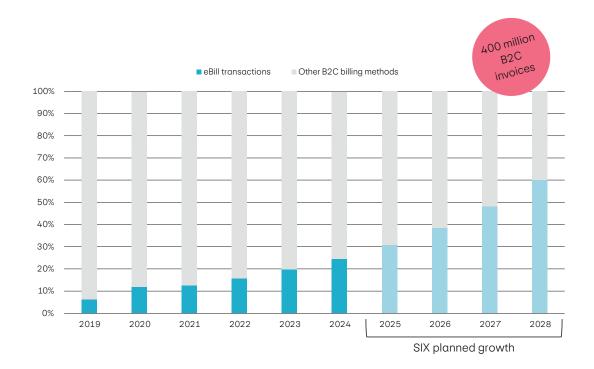
For more detailed information and recommendations on what you can do to win over your customers to eBill, please refer to our best practice guide from PostFinance on this page.

### Outlook

Digitization – and hence electronic invoicing – is both present and future in equal measure. As is the automation of payment processes and reduction of manual payment procedures. As a reliable partner, PostFinance provides you with help and support on this journey.

In 2022, around 400 million invoices were sent to private customers, while the share of eBill invoices is growing at a disproportionately high rate every year. As the operator of the infrastructure of the Swiss financial center, SIX expects that by 2028, 60% of invoices to private individuals will be sent as eBills. This is a trend you should definitely keep an eye on for your company, create the appropriate conditions to respond to and encourage your customers to switch to eBill.

In the B2B sector, too, it is also clear that manual handling of payment processes is becoming less relevant, and for good reason. For some companies, hybrid invoicing is the preferred solution at present, as it contains both structured and unstructured data, combining both worlds. The trend shows, however, that companies are particularly future-proof if they invest in their capacity to act digitally. For B2B, this would mean switching to structured invoices.



60%

As the operator of the infrastructure of the Swiss financial center, SIX expects that by 2028, 60% of invoices to private individuals will be sent as eBills.

### Contact

PostFinance is the number one for Swiss payment transactions. One of Switzer-land's leading financial institutions, it's a dependable partner for over 2.7 million private and business customers and provides innovative, comprehensive financial services for private and business customers in the sub-markets of payment, saving, investment, retirement planning and finance.

PostFinance advisors are proven experts and advise companies from a wide range of sectors on their financial requirements.

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