“IP technology and smart phones, internet channel development, multi-country presence are some of the key challenges retailers face when it comes to payment. They now rely on one-stop-shop payment providers – like Ingenico – as a leverage to develop their business and customer loyalty, to finally focus on what they do best: selling!”

Pierre-Antoine Vacheron, Executive Vice President, Managing Director Europe SEPA
Executive Summary

“The times they are a-changing” – Bob Dylan’s prophesy has never been more applicable to the world of non-cash payments than it is today. Many new players from international industries are launching entirely new currencies and ways of settling bills, countering what were previously conceived as the rules of mature markets just a few years ago. While the banking industry seems relatively slow to adapt to changing circumstances, internet-based companies are quickly seizing new opportunities.

Major developments arise from distinctive markets converging. Knowledge and insight are therefore key for merchants to be able to seize the obvious large scope that this new payment arena has to offer: New means of payment such as contactless and mobile are quickly becoming mainstream; check-out processes are faster, queues are dramatically reduced. Historically considered as a burden, payment has become a business leverage.

Retaining customers is of increasing importance, with competition growing and only small distinctions between the offerings. With the retailing world evolving at an ever faster pace, merchants are left with decisions that are both essential to their success but also too difficult to be made without expert knowledge. For this reason, retailers are turning to payment companies that offer a full spectrum of payment and loyalty solutions. With a comprehensive offering, one-stop shop solution providers act in the best interest of their clients – as a payment partner, leveraging business and boosting customer loyalty. They without question allow merchants to concentrate on what they do best: Selling.

Cornerstones of secure, cross-channel electronic payment. A modern world without payments? Unthinkable! A means of exchange that is separate from actual commodities is one of the bases of modern society. Such means of exchange have existed for thousands of years: the early seashell currencies of North-American Natives, coins, and modern-day electronic and virtual payments all cater to the need to exchange products or services through an independent means that has a mutually accepted value.

In more recent years, electronic payments have evolved immensely. In the course of just one century, paying by card has become as commonplace as paying cash. More than any other region of the world, the United States of America has been at the forefront of this development. Since the introduction of the first plastic card, the Diners Club’s card in 1951, electronic payments have taken first the US and then the world by storm. Worldwide, their popularity continues to rise; today, in times of online shopping, electronic payments have long set the stage for new, virtual horizons.

Even if electronic payments are growing all around the world, the regions of North America and Europe remain at the forefront of this evolution. They account for the highest density and strongest markets with regard to existing electronic payment volumes and traffic.
North America and Europe remain the most frequent non cash markets so far

Transaction volumes in North America and Europe

Source: World Payments Report 2011, Capgemini, RBS, EFMA

This white paper attempts to provide readers with an overview of the key elements of electronic payments – spanning from the recent past to potential future developments. An emphasis is laid on the European landscape. It should be seen as a brief guideline of an increasingly complex world. Describing a highly-fragmented, fast-moving market, only parts are reflected, providing the reader with a valuable glance at the most relevant topics.
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1. The face to face environment

While electronic payments are becoming increasingly omnipresent in the global retail and service industries, cash payment figures are heading south. The advantages that “plastic” offers, makes cards increasingly profitable, leading to a steady replacement of cash by electronic payments. The graph below shows the global numbers of non-cash payments in billions.

The global non cash transaction market’s continued growth

![Graph showing the global numbers of non-cash payments in billions for 2007, 2008, and 2009.](source: World Payments Report 2011, Capgemini, RBS, EFMA)

Far lower expenses than handling cash, state-of-the-art reporting tools, additional services, and the possibilities afforded by customer loyalty management have convinced more and more retailers to accept electronic payments. Consumers show an increased affinity with card payments. Unparalleled comfort, the wide-spread availability of electronic payments and additional service offerings make cards attractive for end users. The numbers speak for themselves: In 2010 for example, only 58.4% \(^1\) of all purchases in Germany – one of the more traditional cash markets in Europe – were paid for in cash. All varieties of electronic payments are continuously gaining market shares, while cash has been steadily losing ground for the past decade.

1.1 ELECTRONIC PAYMENT MEANS AT THE POS

When it comes to stationary electronic payments at the POS, also called “card present” transactions (CP), four major card types are available: Debit cards, credit cards, private label cards, and prepaid cards make up the main bulk of all card present transactions.

Even with regard to different card types and different payment technologies, the general principals of the electronic payments eco-system remain similar all around the globe.

\(^1\) EHI Research, „Zahlung und Kundenbindung mit und ohne Karte“, 2010
Basic contracts between the main card business actors

1. Cardholder presents a credit card to pay for purchases. For card-not-present transactions, the cardholder provides the merchant with the account number, expiration date, billing address, and CVV2.

2. Merchant swipes the card, enters the amount, and transmits an authorization request to the merchant bank. For card-not-present transactions, the account number and other information may be digitally or key-entered.

3. Merchant bank electronically sends the authorization request to the processing network.

4. The processing network passes the request to the card issuer.

5. Card issuer approves or declines the transaction.

6. The processing network forwards the card issuer’s authorization response to the merchant bank.

7. Merchant bank forwards the response to the merchant.

8. Merchant receives the authorization response and completes the transaction accordingly.

Of course, there are many variations even within individual country payment systems. Individual cases will not be addressed within the scope of this white paper.

Authorization and transaction process flow for card payments
1.1.1 Debit cards

In simplified terms, a debit card is linked directly to the customer’s account. He either uses the physical card itself or the respective card number in order to pay. Each single purchase transaction will be debited to the customer’s bank account and credited to the merchant’s account.

Processing debit card payment transactions is usually carried out by a card processor or a payment service provider (PSP).

Some European examples

- Axept (Europe)
- Maestro (Europe)
- V PAY (Europe)
- Visa Electron (Europe)
- Dankort (Denmark)
- Carte Bancaire (France)
- girocard (Germany)
- PagoBancomat (Italy)
- PIN (Netherlands)
- Multibanco (Portugal)
- Postcard (Switzerland)
- Servired, Sistema 48, Euro 6000 (Spain)
- Luottokunta (Finland)
1.1.2 Credit cards

In contrast to the debit card payment process, credit card purchases are either charged to the card holder at fixed intervals in total (charge card) or in partial credit amounts. In the latter case, relevant interests from the issuing banks are added.

Until all payment sums of a certain period are debited from the card holder’s account, credit card companies grant their customers credit – hence the name.

As the most widely accepted electronic payment scheme in the world, credit cards are still the payment method of choice when it comes to cross-border commerce or traveling. Today, major credit card schemes such as MasterCard, VISA, American Express, Diners Club and Discover Card – all originating from North America – are present all over the world. In addition, China Union Pay (CUP) and Japan Credit Bureau (JCB) are very popular card brands used in Asia. Outside their countries of origin, these cards are usually issued as co-branded/co-badged cards either with MasterCard or VISA.

1.1.3 Prepaid cards

Prepaid cards are issued in wide variety: As the traditional gift card, a payment means for special events with international scheme co-branding (e.g. festivals, hotel environments etc.), or as private label cards. Prepaid cards are quickly gaining momentum in terms of usage, becoming ever more important players in the card payment arena.

Prepaid cards can be either open or closed loop cards. In the case of closed loop prepaid cards, the issuer and the acceptance point are one and the same. Open loop prepaid cards, on the other hand, can potentially be accepted at any given number of outlets, as long as they subscribe to the chosen payment scheme. As of today, all major international card companies (cf. 1.1.2) are operating a variety of diverse prepaid programs.

In addition to their relevance in Europe and North America, prepaid cards have come to be widely used, especially in un-/under-banked regions where substantial parts of the population have no access to bank accounts.

1.1.4 Private label cards

Pricing alone no longer constitutes a unique selling proposition. Therefore, offering service and additional value is becoming ever more important for companies. Only by way of this, are they able to become distinctive in competitive markets. With customers having to choose between virtually hundreds of offerings, the private label card provides a powerful tool to retain customers as well as raise brand awareness.

Private label cards serve as a medium for special offers or service campaigns. Incorporating debit card features, they can also be linked to promotional discount schemes and much more. Shops of all sizes employ private label cards as an integral part of their customer loyalty programs. By and large, the cards fall into one of four categories.

1.1.4.a Closed loop

Closed loop cards are restricted to use within a single company.

1.1.4.b Restricted loop

Restricted loop cards are accepted in a larger number of outlets and are not limited to only one company. Several stores, for example a local retail association, can set up a restricted loop card.

1.1.4.c Open loop

In contrast to closed or restricted loop cards, open loop systems make use of an existing payment scheme with a large scope, e.g. that of a credit card company or a widely accepted debit scheme. These cards can be used anywhere where the payment scheme in question is accepted.
2. Internet payments

The Internet’s omnipresence is changing our lives. Retailers have moved into virtual spheres, offering everything imaginable online. Globally, figures are expected to grow into double digits – a growth of 11% in the next five years is projected2. Easy and secure payment over the internet becomes increasingly important as more and more transactions take place online.

European e-commerce revenue in 2010

A wide choice of payment methods is a central criterion for an online shop’s success: the more options for payments there are, the more likely customers are to turn from browsers into buyers.

2.1 ELECTRONIC PAYMENTS ON THE INTERNET

2.1.1 Direct debit

Payment via direct debit still has its place in the national e-commerce markets of Germany, the UK, the Netherlands and other countries. Ease-of-use and high acceptance among consumers make it an inevitable part of the payment mix necessary to win and retain customers.

2.1.2 Cash on delivery

Many consumers still use cash on delivery. For store owners, this payment method involves a high risk of fraud, which is the reason for a steady decrease in its popularity.

2.1.3 Credit cards

As an internationally accepted payment scheme with a reputation for high security standards, credit cards are still popular in all online markets. The leading credit card companies such as Visa, MasterCard and American Express have mastered the transition to the virtual world, building on the wide acceptance and distribution of credit cards.

In order to meet the specific requirements of the online market, Mastercard and Visa have developed procedures geared towards overcoming the security risks posed by the
Internet: MasterCard’s Secure Code and Verified by Visa aim to prevent online fraud by using a PIN.

2.1.4 Prepaid, gift and loyalty cards

Virtual and mobile prepaid, gift and loyalty cards help attract new customers, increase bottom line revenue, improve customer loyalty and generate repeat business. Merchants can maximize the potential of a gift/loyalty card program in a number of ways. Mobile apps and web services, email and SMS marketing campaigns to a customer base can drive revenue, virtual cards being delivered directly through a merchant’s website, printed or shown directly from a mobile phone. Online gift card redemption is done through a prewritten code integrated into the shopping cart and when customers check out, the information is communicated to a secure database. Customized portals enable merchants to manage gift and loyalty programs, granting access to view transactions, reports and purchasing trends, enabling them to collect pertinent information and use it for expanded communication, mining and targeted marketing offers to specific groups of customers.

2.1.5 Alternative online payment

PayPal, Google Wallet (both USA), Moneybookers (UK), Alipay (China), Clickandbuy, giropay, sofortueberweisung.de, Skrill (all Germany), idea (NL), Saferpay (CH) and a whole host of other payment schemes have been specifically developed for the internet. While these schemes cannot be used in a non-virtual environment, they are frequently better adapted to the conditions and requirements of internet trade than initially “offline” payment schemes.

Among all internet-based electronic payment means, credit card and PayPal payments are presently the most popular when it comes to cross-border transactions.
3. Payment evolution and revolution

As aforementioned, the growth of electronic payments is predicted to increase on a global scale. Even if North America and Europe remain the largest markets for electronic payments, Asia, Asia Pacific and Africa are expected to see the highest evolving dynamics. Each region will owe its dynamic to individual specifics.

With regard to Africa, the underdeveloped banking sector is most likely the decisive factor that leads to a faster growth of non-bank driven alternative payments. The driving force for China, on the other hand, will be more its general macro-economic growth which will eventually close the remaining gaps with highly developed western countries. In the US and Europe, a boost for further growth might be the replacement of legal systems.

All market participants, however, be it service providers, payment schemes, card issuers, merchants or retailers, need to be prepared for new technologies, methodologies and the devices to handle day-to-day payment transactions.

3.1. EUROPEAN PAYMENTS IN THE ERA OF INTERNATIONALIZATION

3.1.1 SEPA

“Any card, any country, any terminal”. This outlines the goal of the Single Euro Payments Area. Officially started in 2002, the SEPA initiative aims to establish a single market for electronic payments in Europe. The project was brought to life by the ECB (European Central Bank) and the European Council’s Lisbon Summit. It intends to overcome technical, legal and market barriers in order to create a single market for retail payments throughout Europe. Customers in the SEPA will be able to make cashless euro payments in all of Europe as easily, securely and efficiently as if they were in their own country. SEPA spans the entire EU (European Union) as well as the AELE countries; Iceland, Liechtenstein, Monaco, Norway and Switzerland. When the SEPA process is finished, all cross-border payments throughout the SEPA will be treated as domestic.

3.1.1.a The structure of the SEPA

Initiated in 2002, SEPA is designed to be a long term project. 32 countries in Europe with more than 514 million citizens and over 9000 banks are part of the project, which illustrates its complexity. The SEPA defines three new payment instruments: SEPA Direct Debit (SDD), SEPA Credit Transfers (SCT) and SEPA for Cards.

The SEPA projects were planned to be achieved in three phases: The design, implementation and migration phase. The design phase was planned to take place between 2004 and June 2006. In this phase, the rules and practices for the new payment instruments and the standards to use were set out. However, this phase was not finished at the planned date, as the standards for SEPA for Cards was not achieved at this period. The implementation phase was planned to begin in July 2006 and to end in January 2008.

The objective was to give the finance industry the opportunity to devise and test new products for the SEPA, and also allowed SEPA rules and practices to be carried over into national legislations. Simultaneously, the bodies responsible for the successive migration phase were set up, and the harmonized legal basis was set up by the Payment Service Directive, (cf. chapter 3.3.3.1c) proposed by the European Commission and adopted by the European Parliament in December 2007. The migration phase is dedicated to the rollout of new SEPA instruments, standards and infrastructures.

It started in January 2008 with the migration to the 1st SEPA instrument, the SEPA Credit Transfers, followed by the SEPA Direct Debits in November 2009.

The migration end, initially planned for 2008, was not reached, and the slow migration to the new SEPA DD and SEPA CT has driven the European Commission to propose a regulation defining an end-date for the migration. The regulation was adopted in February 2012 and stipulates 1 February 2014 as the end date for migration to SEPA credit transfers and SEPA direct debits in the euro area. 31 October 2016 is the deadline for non-euro countries and for niche domestic products.

3.1.1.b Governance – Who does what

In order to cope with the multifaceted, multilingual and multinational challenges SEPA poses, the decision and law making mechanisms of all involved parties need to be in harmony.

Both national and international institutions were integrated into the SEPA process. At national levels, every member country installed platforms and discussion groups to help advance the SEPA process. On the European level, an overarching institution was set up. It consists of three
governing bodies. The European Payments Council (EPC), the Contact Group on Euro Payments Strategy (COGEPS), and the so-called high-level meetings between market participants and the Eurosystem (i.e. the national central banks and the European Central Bank ECB).

The COGEPS was created by the ECB. Its purpose is to foster an informal dialogue between the banking communities and the central banks. At COGEPS, the banking industry meets with the Eurosystem to address common issues concerning the SEPA. This includes payment systems and services as well as topics that have an effect on the retail industry.

A new consultative body, the SEPA Council, was created in 2010. The objectives of the SEPA Council will be to make recommendations about actions enabling SEPA to be achieved.

3.1.1.3 PSD – The ‘Payment Services Directive’

The Payment Services Directive (PSD) provides the legal framework for the creation of the homogenous, EU-wide payments market. It states all rules and regulations necessary to realize SEPA. Other than aiming to make cross-border payments both simple and feasible, it also intends to strengthen the market by allowing new entrants to participate. Thus it achieves greater efficiency – in regard to costs as well as from a technological point of view.

The full text of the Payment Services Directive is available for download at http://ec.europa.eu/internal_market/payments/framework/psd_en.htm

3.2 NON-CASH PAYMENTS IN THE SEPA

Besides cash, three SEPA payment instruments are expected to achieve the Single Euro Payments Area: SEPA Direct Debit, SEPA Credit Transfer and SEPA for Cards.

3.2.1 SDD – SEPA direct debit

SEPA direct debit (SDD) aims to allow the exchange of direct debits in the entire SEPA zone based on standards and harmonized rules. The SEPA Direct Debit is a new scheme developed by the European payments Council on the request of the Authorities (ECB and EC). This new payment scheme sets a framework of technical requirements and business rules. It is stipulated that all participating national schemes must comply with these in order to achieve interoperability. After its inception in November 2009, the SDD has not been adopted in an acceptable timeline by banks and other participating payment institutions according to the authorities.

Therefore in 2012, the European Commission made a proposal to define an end-date for migration in a regulatory way. The adoption of the regulation n°260/2012 defines business and technical requirements and stipulates the deadline for migration to be February, 1, 2014.

3.2.2 SCT – SEPA credit transfer

The SEPA credit transfer (SCT) scheme works as a rulebook for credit transfers in euro. It provides the technical specifications and rules for processing SEPA credit transfers that banks must adhere to. The scheme was launched on January 28, 2008.

3.2.3 SEPA for cards

In order to regulate the booming market of card payments, the EPC has defined a set of high-level principles for SEPA card payments. All stakeholders – such as issuers, acquirers, card schemes and operators – must adhere to the so-called SEPA Cards Framework (SCF).

The SEPA Cards Framework applies to debit cards as well as credit cards (cf. Chapter 1.1.). Alongside the SCF, the EPC is currently defining the technical requirements for standardized card payments including card acceptance and issuing technology, security and functional requirements and also the card payments protocols to be used.

The objective is to allow cardholders to use their cards throughout the entire SEPA while merchants will be able to process any card with a single terminal. Among the technical requirements, the chip-based EMV technology is at the heart of the SEPA for Cards requirement. The secure EMV technology also serves to curb fraudulent card usage.

To achieve the SEPA for Cards, the European Payments Council set up a consultative body, named the Cards Stakeholders Group, in charge of compiling high-level technical requirements. These high-level requirements will allow the emergence of implementation standards usable SEPA-wide, allowing the achievement of an integrated electronic payment market.

In order to enable the SEPA for cards, new technical specifications for open and interoperable implementation standards will be developed allowing the solutions provider to develop standard products. In the SEPA for cards there are currently two implementations: 1. the harmonized security evaluation and certification for POIs and cards allowing the delivery of a single certificate to sell terminals everywhere in the SEPA area, taking place within the OSec (Open standard for security evaluation certification) and pilot scheme,

2. a single functional scope allowing any card on any terminal in the SEPA area to be accepted, independently of the card’s brand and the issuing country, within the OSCar (Open standards for cards) pilot scheme.

The OSEC is a current-on-going pilot scheme with expected 1st certification achievement in Q3 2012. It is aimed at
harmonizing and simplifying security procedures and compliance certification for all payment terminals operating within SEPA. If the pilot scheme proves successful, this new methodology can be rolled out in the whole SEPA area as the new ecosystem for security certification, starting around 2014.

(Open Standards for Cards) Consortium is aimed at defining the functional scope of a SEPA-wide payment solution – including a standard terminal-to-acquirer protocol with a single payment application – allowing all bank issued cards to be accepted independently of the country of origin.

The OSCar pilot is based on the universal ISO20022 acquirer protocol specifications provided by EPASOrg, and on the standard SEPA-FAST payment application proposed by the CIR (Common Implementation Recommendation) working group.

Ingenico is a key player in all these initiatives and is participating actively as 1st mover in the pilot launch with its key customers. Indeed, Ingenico is convinced that these standards are the best suited to allow the Group to accompany its customers in the development of their international SEPA-wide operations.

3.3 NEW HORIZONS: THE NEAR FUTURE OF ELECTRONIC PAYMENTS

Today, electronic payments are no longer merely a card issue. Technological advances have already spawned numerous innovative and easy-to-use payment methods that grant us a glimpse of the future of payments.

3.3.1 Contactless

More comfort, more speed and increased security: At present, contactless payments represent the next step in the evolution of the payments landscape. Retailers profit from a speedier payment process and less queuing at the point of sale. Major global companies such as MasterCard (payPass), Visa (PayWave) and Google are banking on this payment technology, which allows customers to start the transaction simply by holding their NFC-compatible card or cell phone up to the contactless reader. While PayPass and PayWave cater to so-called micro payments with a limit, the contactless “Google Wallet” is secured by a PIN and works for higher amounts as well. In addition, Google intends to integrate additional features such as loyalty programs, rebates and electronic vouchers into their payment scheme.

3.3.1.a E-/M-Payments

With the Internet booming, online commerce has been growing rapidly. Ecommerce is steadily becoming more important, so much so that hardly any major retailers do without an online offer. M-commerce starts where ecommerce ends, i.e. with complete mobility when purchasing articles. While the portals used are much the same, the devices employed differ: Smartphones are now commonplace, and with growing trust in the technology, consumers make more use of them.
3.3.2 Mobile Payments

The cell phone stands at the center of many innovative developments in the field of electronic payments. In 2011, 141 million people worldwide are expected to pay via their mobile phones. According to a study by US analyst Gartner, a 38% increase is in store for so-called mobile payments. This extreme growth is largely driven by developing countries, where a large percentage of the population owns a mobile phone, but no bank account. For them, mobile payments and mobile banking are a welcome chance to participate in methods of commerce that other countries have long taken for granted.

Major global companies like Google are also banking on payments via cell phone. Cooperating with other global players such as the payment specialist Ingenico, their payment scheme “Google Wallet” embraces much more than payments alone. It also incorporates loyalty programs, discounts, electronic vouchers – the opportunities seem endless.

Over the last 20 years, cell phones have become mass products; in the same time span, the entire way we live has changed. Cell phone technology has found its way into payment terminals. Based on GSM or GPRS technology, state-of-the-art terminals allow merchants to move their point of sale wherever they want. Especially merchants who engage in seasonal activities benefit from increased opportunities: Card-based payments at markets, fairs and other events make collecting payment and bookkeeping easier than ever and minimize the necessity for cash handling. As an additional benefit, card payments are proven to attract new customer groups.

But even stationary merchants – traditionally not a target group for mobile payment – can benefit from them. They allow new check-outs to be quickly set up, and can thus function as queue busters during rush-hour shopping. Dwindling costs make this an ever more attractive option.
4. The relevance of loyalty programs

There is no question that building a strong relationship to customers has become more important than ever for merchants in all fields of trade. With marketplaces throughout all industries becoming increasingly crowded and the on- and offline worlds converging, winning and keeping customers is essential to a business’s success. Therefore brand loyalty programs are far more than merely hype – they make all the difference by enabling companies to retain customers, acquire new ones and increase turnovers.

But what’s important when choosing a partner? The abundance of available loyalty programs makes the choice a difficult one. However, by bearing in mind a few basic requirements, every merchant can find the right solution.

4.1 KNOWING YOUR CUSTOMER: MANAGING BUSINESS BETTER

What constitutes a perfect loyalty program? What are its benefits? And, basic but vital: How does the program work? Generally speaking, the idea behind loyalty programs is to give customers an incentive to come back for additional purchases. Bonus points, rebates and added value, e.g. by way of bonus services, serve as a link to the customer. Each of these methods has its own particular benefit. Bonus point programs help the merchant to get to know their customers; the gained knowledge can be used for dedicated cross- and upselling offers. Rebates, on the other hand, function as a direct purchase incentive, encouraging the customer to buy more. Finally, value-added services create a positive shopping experience, thus creating loyalty and the incentive to return in the future.

When launching a loyalty program, the first question merchants ask is “What do I need?” Obviously, the ideal solution for a large, international trade company is different from the one that works best for a single, owner-operated store. While both merchants will profit from a well-structured and savvy loyalty solution, they each require different structures. In both cases, however, one fact holds true: procuring all services from a single source makes it easier to devise and integrate the program. The offer should include:

1. Expertise regarding program development
2. Depending on the scope, flexible solutions for:
   • Gift cards
   • Prepaid cards
   • Promotion cards
   • Mobile phone apps
   • Contactless solutions
   • Multi-channel programs that cater for converging markets
   • Online loyalty programs

3. Hosting of the necessary IT for:
   • Clearing
   • Settlement
   • Authorization
   • Payments
   • Data warehousing
   • Data Analytics
   • Reporting and monitoring

4. Card management from creation and production to logistics, including:
   • Application management
   • Account management
   • Bonus & voucher management

Not every merchant’s program will utilize all of these services, but scalability is another key factor that should be considered when choosing a loyalty program provider. When implementing programs, it is important to be able to broaden the scope of the program and change the offers for customers – otherwise, customers will grow accustomed to the service, taking it for granted instead of seeing it as a special bonus.
In the decision process for a loyalty program, there are eleven basic choices to be made.

1. Will the program be self-contained or part of a network of already branded cards, such as the Payback program of the German market?

2. If a program is already in place: Will the new program continue to use the existing card or introduce a new one?

3. Will a payment function be included? If so: debit, credit or prepaid?

4. Which card technology or technologies will be used – RFID, magnetic stripe, chip?

5. How will the card be connected to the merchant’s systems – via POS or card terminal? Should the card merely function as an id-card?

6. What loyalty bonus system does the program feature – reward or discount?

7. Will the bonus be redeemed immediately or can it be accumulated and redeemed at a later time?

8. Will a reward shop be put in place, or will redemption take place through vouchers?

9. How will additional services be implemented?

10. Which channels will be used for communication with the customer – text messages, email, online portal, printed mail?

11. Should the program be anonymous or include a registration?

With so many choices to be made, consulting becomes more and more important, which limits the choice of providers to those experienced enough to provide help in making a sound and viable decision.

Market trends also play an important role. The markets in Europe are highly fragmented, but on the whole, online, mobile and contactless solutions are gaining momentum at present. Some markets, such as the one in Germany, are almost saturated – Germany has an approximate 150 m loyalty cards in the field – with a population of 80 m. There is still considerable potential for expansion in the European playfield at large, however. Market experts agree that mobile and contactless (tap & go) solutions in particular will play a major role in the future.

4.1.2 Prepaid cards

The prepaid market in Europe is the fastest-growing area of payments: An annual growth of 23% is underscored by the increase in open-loop cards being issued. By 2015, open-loop cards are expected to account for 45% of all prepaid cards. However, recent developments in legislature might cause the actual growth to fall short of this projection: e-money initiatives aim to abolish the anonymity of prepaid cards above a certain balance in order to prevent money laundering.

In addition to retail, where they have become a popular present with high consumer acceptance, prepaid cards play an increasingly influential role in other industries as well: travel and tourism, employee reward programs, promotions, public transport, and more.

The main benefits are the increase in sales volume, optimized processes, customer loyalty and acquisition, diverse marketing functions and, not least, a reduction of risk. Debit and credit card fraud as well as forgery are virtually impossible with a prepaid program in place.

How do prepaid cards work? The individually and uniquely numbered cards are managed through an online platform that provides an authorization and an account system. Ideally, customers use only part of the card’s balance at a time, and repeatedly recharge the card when the balance is depleted. The card’s remaining balance can be checked at the participating outlets as well as through an online tool. The format of the card (open loop, closed loop, with or without payment function) determines at which stores and for which functions prepaid cards can be used.

4.1.3 Gift cards

Technically speaking, gift cards can be characterized as closed loop prepaid cards. According to polls, they rank among the most favored choice of present. This is true not only from the perspective of the customers, but also that of merchants. Small wonder, considering a quarter of gift card owner’s return two to three times before they’ve spent the entire amount charged to their card. 20% of customers spend more money than the amount initially charged to the card – 90% of these even double the amount. That 5 to 20% of all gift cards are never redeemed provides an additional inflow of funds.
4.2. EUROPEAN BEST PRACTICE. GERMANY: PAYBACK MAESTRO

The PAYBACK system is Germany’s largest multi-partner bonus program. It partners with large companies such as the METRO Group supermarkets, gas station chain BP/Aral, real supermarkets, dm drugstores, and many others.

In cooperation with MasterCard and easycash Loyalty Solutions – an Ingenico company –, PAYBACK has set up the PAYBACK Maestro card. The card is an open loop payment card that incorporates a bonus function based on point scores. Customers are able to accumulate points, which can be redeemed in a variety of ways (as goods, money, donations etc.). Through the Maestro debit scheme, users have access to over 11 m acceptance points. Moreover, the PayPass function allows contactless payments, and VISA secure code is available for purchases on the Internet.

As the processing partner, easycash Loyalty Solutions is responsible for the card accounts’ management. The Hamburg-based company also handles the authorization, clearing, settlement, and issuing processes of the card.
5. How to do business – or what does a merchant really need?

Merchants new to card acceptance or thinking about establishing a customer loyalty program will first ask themselves what functions they need. Of course, the actual need varies, meaning that a blanket answer is not possible.

Internet and mobile payments are of strategic value to merchants, undeniably a growth market and an opportunity to win loyalty and benefit from new transactional fees. Consumers are demanding better payment options and user experiences, and the value propositions for mobile payment models are strategic, with substantial ROI and loyalty payback.

Today’s businesses require real-time visibility and reporting, a detailed view of new services and campaign success, enabling them to control the network from a technical perspective and glean critical payment and transaction data across the board.

Merchants require a flexible and robust payment infrastructure, allowing them access to a variety of POS payment solutions to suit their present and future business needs. Keeping pace with the increasing number of card schemes and payment applications is key as consumers demand ever more choice and convenience when it comes to paying for purchases. The challenge to merchants then, is to be and remain competitive and unique in their payment offerings at the checkout.

Maximizing the security of payment systems and cardholder data in an increasingly complex and costly regulatory environment is another critical challenge for merchants today. Businesses need a high performance, future proof, affordable PCI-compliant security solution that can be rolled out simply and successfully, ensuring complete peace of mind for merchant and consumer alike.

The payment infrastructure begins with a payment terminal. This device allows the merchant to accept card payments and participate in the card payment network. The terminal is linked to the existing POS system, allowing the acceptance of cards in the merchant’s store. In order to allow transactions to be carried out, the terminal also has to be connected to a provider network, which routes and processes transactions.

When choosing the right payment terminal and network services, the merchant must choose which card schemes he wants to accept: debit or credit, national, international, restricted- or open-loop loyalty schemes, and so forth. He also has to consider payment technologies. The ability to read a card’s magnetic stripe and EMV chip is a standard feature of modern payment terminals, but the increasingly relevant mobile payments require a terminal with a specific NFC reader.

Ideally, merchants do not have to concern themselves with the technical details of payment systems and debit schemes in order to accept card payments. Full-service payment specialists allow them to put all payment necessities into the hands of an expert, “one contact – all options” should be the motto of the payment partner of choice. Companies like Ingenico, easycash and its sister company easycash Loyalty Solutions offer end-to-end solutions that encompass the full range of payment services: from terminal sales/rentals and configuration to shipment and maintenance all the way to payment transaction processing, routing, acquiring, reporting and accounting.
6. Glossary of payment terms

**Acquirer**
A company which acts as a mediator between the card company and the merchant. Besides authorizing payments, acquirers also account for the transaction process and settlement of card payments.

**Authorization**
The process of verifying a card. Authorization may apply to the fact that the respective account is sufficiently funded and may regard the validity of a card.

**Black List**
A database listing cards which were reported stolen, lost or not solvent, and thus may not be used. Consulting a black list enables merchants to reduce the risk of faulty payments (such as chargebacks). Consumers are protected from an unlawful use of their stolen or lost card.

**Card Not Present**
Transaction where the card is not physically present at the time of the transaction (such as online orders). Neither card nor card reader is required to initiate a payment.

**Chargeback**
A transaction returned by the card-issuing bank to an acquirer. A transaction may be returned because it did not comply with the associated rules and regulations, because the account did not contain sufficient funds, or because it was disputed by a cardholder.

**Credit Card**
Payment card issued by a credit card company. The affiliated bank account is debited with a delay (as opposed to the direct debiting that occurs when using a debit scheme).

**Credit Card Processor**
A company that performs authorization and settlement of credit card payments, usually handling several types of credit and payment cards (such as Visa, MasterCard, and American Express, JCB, Diners).

**Customer Card**
A private label card to be used in a defined environment for payment purposes. It may be suitable for use only within a single store or chain of stores (closed-loop card), or it may be attached to a payment scheme that encompasses further outlets.
Debit
A transaction – such as a check, automated teller machine (ATM) withdrawal, or electronic purchase – that debits a checking account.

Debit Card
Payment card which withdraws funds from the cardholder’s bank account immediately at the time of purchase.

E-money
E-money (or electronic money) is a digital equivalent of cash, stored on an electronic device or remotely at a server. One common type of e-money is the ‘electronic purse’, where users store relatively small amounts of money on their payment card or other smart card, to use for making small payments. Depending on whether it is issued by a bank, payment institution, or a merchant, e-money can be used in closed or open environments.

Encryption
The process of securing data using a mathematical formula that hides its substance.

HTTPS (Hypertext Transfer Protocol – Secure)
URL-protocol for handling secure transactions by way of encrypted communications.

Interchange Fee
Fees set by credit card associations (e.g. Visa and MasterCard) for the processing of credit card transactions among their member banks. Interchange fees vary based on the type of card and method of processing.

Mail, Online, Phone Order Transaction
A transaction where a cardholder orders goods or services from a merchant by telephone, mail, internet or other electronic means. Neither card nor cardholder are physically present during the transaction.

Merchant
An entity that contracts with a bank or an agent of the bank to originate transactions.

Merchant Agreement
A written agreement between a merchant and a bank defining their respective rights, duties, and warranties with respect to the acceptance of the bank card and matters related to the bank card activity.
Merchant Id/Number
A number issued to a merchant by the credit card processor. It is used to identify the merchant within the credit card processing systems.

Merchant Report
A written record prepared by the credit card processor in defined intervals. It lists all transactions for the merchant’s account, including the fees charged.

Non-Qualified Transaction Fees (Non-Qual)
Bank card transactions that do not meet Visa/MasterCard criteria to be processed at the standard (qualifying) interchange fee. These transactions are charged a surcharge or higher rate. In most cases corporate cards – and often rewards cards – are considered non-qualified, but non-qualification can also be the result of how the transactions were processed.

Payment Gateway
A web-based service that transmits and authorizes card transactions securely via a third party (cf. e.g. Payment Service Provider). Payment gateways use encryption to secure sensitive information, such as credit card numbers.

Payment Card Industry Data Security Standard (PCI DSS)
A joint standard developed by the major credit card companies. It functions as a guideline to help organizations that process card payments prevent credit card fraud, hacking and various other security issues. The standard outlines specific requirements (based on the volume of transactions processed) that companies processing card payments must meet to be PCI Compliant. Non-PCI compliant processors risk being fined and/or losing the ability to process credit card payments.

Payment Institution
As a non-banking financial institution (NBFC), a payment institution offers banking services without holding a banking license. These services include loans and credit facilities, retirement planning, money markets, underwriting, and merger activities. Payment institutions are subject to banking regulations and are controlled by the national regulatory authorities.

Payment Service Provider
Company offering services for the acceptance of electronic payments.

Prepaid Card
A payment card which is not affiliated to a bank account. The value is stored on the card itself.
Qualifying Transactions
Bank card transactions that meet Visa/MasterCard criteria to be processed at the most favorable interchange fee.

Recurring Billing
Transactions for which a cardholder grants permission to the merchant to periodically charge his account for recurring goods or services.

Settlement
The process of sending a merchant’s transactions to the network for processing and payment.

SEPA
Single Euro Payments Area – European payment zone comprising 32 member countries. It was created in order to make transnational payments easier and stimulate competition within the Euro zone.

SEPA Direct Debit (SDD)
Direct debit payment method for the SEPA region by which amounts can be transferred from one account to another with prior consent of the owner of the originating account.

SEPA Credit Transfer (SCT)
The SEPA Credit Transfer scheme serves as the basis for payment service providers to provide a credit transfer service in the SEPA. It incorporates the initiation, processing and reconciliation of payments.

SEPA Card Framework (SCF)
The SEPA Cards Framework defines the principles and rules for banks, schemes, and other stakeholders in the SEPA environment. It will enable convenient, cross-border card usage throughout the 32 member countries of the area.

Shopping Cart Software
Software used in e-commerce to assist people making purchases online. Such software typically allows online customers to “place” items in the cart. Upon “check-out”, the software calculates a total for the order, including shipping, handling and taxes, if applicable. Typically, the software also provides a method of capturing credit card information for processing via a payment gateway.

Third-party Processor
An entity that processes credit card transactions on behalf of other entities via their merchant account.